DOCTOR OF CLINICAL PSYCHOLOGY (DCLINPSY)

Doctorate in Clinical Psychology: Main Research Portfolio

1) Systematic Review of the Literature: Low self-esteem and internalizing disorders in children and adolescents; 2) Service Improvement Project: Using carer feedback to develop family information sessions within North Somerset Early Intervention for Psychosis service; 3) Main Research Project: Mental Imagery and idiosyncratic goal achievement in depression: a three-group comparison.

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Research Portfolio Submitted in Part Fulfilment of the Requirements for the Degree of Doctorate in Clinical Psychology Volume 1 of 2

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Abstracts

Main Research Project

Mental Imagery (MI) and implementation intentions (II; creating concrete plans for when, where and how a goal is to be achieved) have shown promise in enhancing performance and goal achievement. As depressed mood is often characterized by loss of interest and reduced engagement in previously rewarding activities, the aim of this study was to investigate whether MI and II strategies could be used to enhance rates of goal achievement in participants presenting to services with low mood/depression. An experimental three-group comparison was used, with random allocation to the levels of the independent variable (MI, II, Control). Each participant (N = 44) devised three idiosyncratic goals, with the researcher guiding the participants in the MI/II groups through the relevant cognitive strategy in relation to their first goal. Those in the MI group reported a significant increase in the perceived likelihood of achieving their goals post-strategy. There were no significant differences in the achievement of goals amongst the three groups, although higher rates of goal achievement were apparent in the MI group. The current study suggests that generating specific goals and using MI may represent a valuable technique for improving individuals' beliefs that their goals are attainable and within their reach. Further research with larger samples is recommended to explore the impact of techniques on actual goal attainment.

Service Improvement Project

Background: Clinical guidance recommends that multi-family psychoeducation groups) should be offered as part of the stepped-care model of intervention in early intervention for psychosis services. This results from the recognition of the important role that families play in supporting the recovery of service users experiencing a first episode of psychosis.

Aims: This study aimed to evaluate and improve a series of multifamily information sessions within the North Somerset Early Intervention for Psychosis Team.

Methods: Following the initial running of a multifamily psychoeducation group (Group 1), telephone interviews were conducted with six family members who attended to evaluate and identify recommendations for the improvement of the group. This feedback was used to inform the format and content of a second running

of the group (Group 2). Three further participants provided evaluative qualitative feedback on this revised group.

Results: Following collection of feedback from Group 1, four key themes were identified including the positive aspects of group attendance (e.g. receiving relevant information, opportunity to meet the team and other families), challenges of groups (e.g. accommodating the needs of different families), impact of caring (e.g. feeling isolated and unknowledgeable) and recommendations for improvement (e.g. additional content for siblings, simplifying information). This information was used to develop Group 2, which was adapted to make the information more family-friendly (e.g. simplifying information), with the inclusion of some further information.

Conclusions: The positive feedback received from those who attended the group supports the continued use of family information sessions within the service. The use of feedback and the development of this aspect of the service were perceived positively by the team.

Systematic Review of the Literature

Background: Cognitive behavioural therapy for low self-esteem (LSE) has shown promise as a trans-diagnostic model for treating mental health difficulties in adults. To ascertain the potential value of this treatment approach in working with young people with internalising disorders, we need to develop our understanding of LSE within these mental health conditions. The aim of this review is to explore 1) the co-occurrence of clinically significant anxiety/depression and LSE in young people, and 2) the association between LSE in childhood and adolescence and mental health difficulties in later adolescence and emerging adulthood.

Method: A systematic search of two electronic databases (PsychInfo/Pubmed) was conducted to identify relevant studies.

Results: Ten studies examining the association between LSE and clinically significant anxiety/depression in young people met the inclusion criteria, as did eight studies investigating the association between LSE in under 18 year-olds with internalising difficulties in later adolescence/emerging adulthood.

Conclusions: Although relatively few studies investigating 'clinically significant' anxiety and depression were identified, the located studies consistently supported

the co-occurrence of LSE and internalising disorders in young people. This was found to be particularly true for young people with depression and co-morbid mental health difficulties. There appears to be less evidence for the association between reported LSE in childhood and adolescence and anxiety/depression in adolescence/emerging adulthood, potentially due to the complexity of confounding variables. Further research investigating Fennell's cognitive model as a trans-diagnostic treatment model for young people with LSE is indicated.

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Acknowledgements

I would like to thank my supervisor Dr James Gregory for his help, support and enthusiasm in developing my main research project. I would also like to acknowledge and thank all the service users who gave their time to take part in the research project and the clinicians in primary care services in Weston Super Mare, Bristol and Cheltenham for their help in recruiting. I'd especially like to thank Ting Chiu, Sebastian Maciejewski, and Nicola Farry for keeping recruitment alive within the services.

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Doctorate in Clinical Psychology

Systematic Review of the Literature

Low self-esteem and internalizing disorders in children and adolescents: A systematic review of the literature

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Target Journal: This paper is formatted for the Child and Adolescent Mental Health journal. This journal focuses on mental health issues in children, with a particular focus on clinical implications for practitioners.

Abstract

Background: Cognitive behavioural therapy for low self-esteem (LSE) has shown promise as a trans-diagnostic model for treating mental health difficulties in adults. To ascertain the potential value of this treatment approach in working with young people with internalising disorders, we need to develop our understanding of LSE within these mental health conditions. The aim of this review is to explore 1) the co-occurrence of clinically significant anxiety/depression and LSE in young people, and 2) the association between LSE in childhood and adolescence and mental health difficulties in later adolescence and emerging adulthood.

Method: A systematic search of two electronic databases (PsychInfo/Pubmed) was conducted to identify relevant studies.

Results: Ten studies examining the association between LSE and clinically significant anxiety/depression in young people met the inclusion criteria, as did eight studies investigating the association between LSE in under 18 year-olds with internalising difficulties in later adolescence/emerging adulthood.

Conclusions: Although relatively few studies investigating 'clinically significant' anxiety and depression were identified, the located studies consistently supported the co-occurrence of LSE and internalising disorders in young people. This was found to be particularly true for young people with depression and co-morbid mental health difficulties. There appears to be less evidence for the association between reported LSE in childhood and adolescence and anxiety/depression in adolescence/emerging adulthood, potentially due to the complexity of confounding variables. Further research investigating Fennell's cognitive model as a trans-diagnostic treatment model for young people with LSE is indicated.

Keywords: self-esteem, internalising disorder, anxiety, depression, adolescence

Low self-esteem and internalising disorders in children and adolescents: A systematic review of the literature

Mental health disorders are relatively common amongst children and adolescents with approximately one third of young people experiencing a mental health disorder at some point in their lives (Merikangas, Nakamura, & Kessler, 2009). Within the UK specifically, YoungMinds report that one in ten children aged 5-16 years of age have a diagnosable mental health disorder, with 3.3% of (or 290,000) young people meeting the criteria for an anxiety disorder and 0.9% (or 80,000) experiencing serious depression (Green, McGinnity, Meltzer, Ford, & Goodman, 2005). Given that the World Health Organisation defines mental health disorders as one of the leading causes of disability worldwide (Lopez, 1996), the importance of a comprehensive understanding of 'clinically significant' mental health problems and effective treatment options is warranted.

There is growing interest in the understanding of low self esteem (LSE) and its association with mental health difficulties in adults as well as children and adolescents (henceforth referred to as 'young people') (e.g. Evans, 1997; Fennell, 1997; Mann, Hosman, Schaalma, & de Vries, 2004). Fennell (2009, p.6) defines self-esteem as 'the overall opinion we have of ourselves, how we judge or evaluate ourselves and the value we attach to ourselves'. Self-esteem is commonly measured using self-report measures, the most widely-used of which is the Rosenberg Self-Esteem Scale (Rosenberg, 1965).

A body of studies have demonstrated a correlational relationship between LSE and symptoms of anxiety and depression at different ages (e.g. Battle, 1987; Battle, Jarratt, Smit, & Precht, 1988; Plunkett, Henry, Robinson, Behnke, & Falcon Iii, 2007). However, the extent to which LSE is associated with 'clinically significant' anxiety and depressive disorders in young people is yet to be established.

The relationship between mental health difficulties and self-esteem (SE) is considered to be complex, with Fennell (2009) proposing that LSE can either increase an individual's vulnerability to developing a mental health problem, or can develop as a consequence of a variety of mental health difficulties (e.g. the experience of panic attacks reducing an individual's interest in activities; Fennell, 1997). The stability of self-esteem is also noted to change over the developmental lifespan. For example, Trzesniewski, Donnellan and Robins (2003) suggest that self-

esteem is less stable in childhood, increasing in stability towards later adolescence and emerging adulthood, with a noted reduction in stability in older adulthood.

Fennel (1997) advises that addressing LSE directly within psychological interventions is most effective in improving outcomes for individuals when LSE represents a vulnerability factor for the development of ongoing mental health difficulties.

A review of the studies investigating this relationship in young people is especially pertinent when one considers the emerging success of cognitive behavioural therapy (CBT) for LSE in improving outcomes for adults with a variety of mental health disorders (Waite, McManus, & Shafran, 2012). The cognitive-behavioural treatment model of LSE (Fennell, 1997; Figure 1) in adults is formulation-driven and involves identifying and challenging dysfunctional assumptions and negative beliefs about the self, referred to as the 'bottom line' (e.g. 'I am worthless/unlovable'), as well as noticing and logging positive data about the self and one's positive qualities.

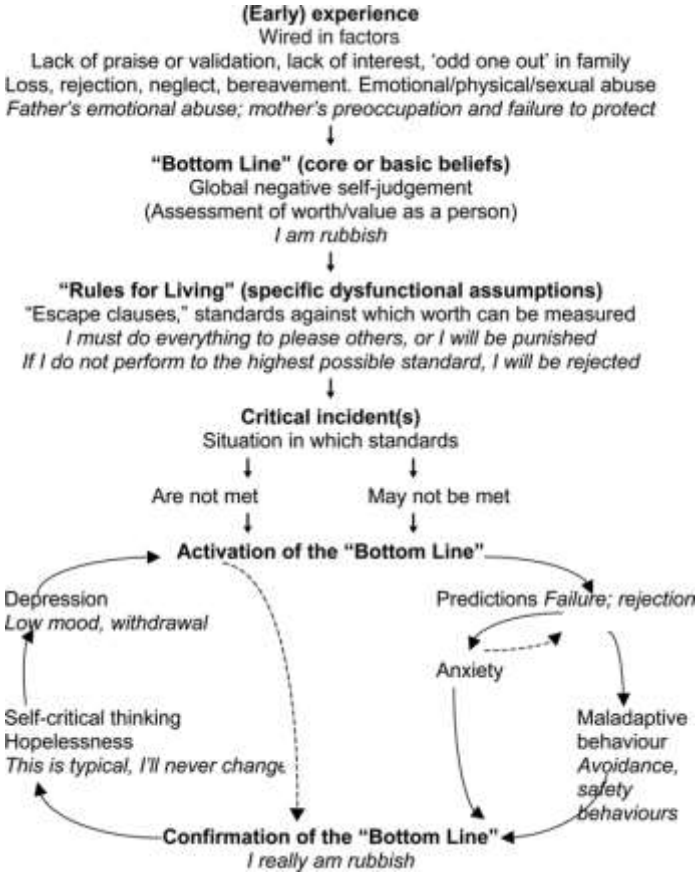

Figure 1. Model of LSE (Fennell, 1997)

Although a meta-analytic review indicates that interventions focused on improving self-esteem in children and young people have shown promise (Haney &

Durlak, 1998), there are no such trials of Fennell's (1997) CBT trans-diagnostic treatment model in young people with mental health problems. In order to establish whether evaluating the efficacy and effectiveness of psychological therapies for LSE, such as Fennell's CBT for LSE, as a trans-diagnostic treatment in the child and adolescent clinical populations is indicated, we first need to establish whether LSE is a trans-diagnostic factor associated with internalising mental health problems (including all anxiety disorders, depression and dysthymia) in this age group.

In addition, the vulnerability model postulates that the negative evaluative thoughts associated with LSE represent a risk factor for the development of later mental health difficulties (e.g. Beck, 1967). Establishing whether LSE in childhood/adolescence represents a vulnerability factor for the development of later internalising mental health problems would help to ascertain the appropriateness of investigating CBT for LSE as an intervention to circumvent the development of anxiety and depression.

The aim of this review is to establish what is known about LSE and anxiety/depression in young people by addressing the following questions:

- Do children and adolescents (18 years of age and younger) with clinically significant anxiety disorders and/or depression also have LSE as measured on a validated psychometric questionnaire?
- Do children and adolescents (18 years of age and younger) with low self-esteem as measured on a validated questionnaire develop depression and anxiety symptomology later in adolescence and young adulthood?

Method

Procedure

Published research was identified through APA PsychNet by searching the following terms in keywords, title and abstracts. Search terms used to identify papers across databases included a combination of 'self concept' OR 'self esteem', 'child*' OR 'adoles*', and 'anxiet*' OR 'anxious*' OR 'anxiety disorder*' OR 'depress*' OR 'internal* disord*' OR 'low mood'. Within APA PsychNet, filters were set to include articles related to 'childhood (birth-12years)' and 'adolescence (13-17 years)', and 'peer-reviewed' journals. A further search was conducted in Pubmed using the following search terms: 'Anxiety Disorder' (Majr) OR 'Depressive disorder' (Majr) AND 'Self esteem' (Mesh), with restrictions set to

identify papers published in the last 10 years, available in English and including samples of young people (birth-18 years). Email alerts allowed for additional articles to be identified following the initial search. Reference lists of included articles were checked.

Although it was considered that many of the relevant articles for question 2 would be located during the initial search, a further systematic search was conducted to locate any additional relevant articles. A search of the terms 'anxi*' OR 'depress*' AND 'self-esteem' with filters set to identify 'longitudinal studies', 'childhood (birth-12years)','adolescence (13-17 years)' and 'peer-reviewed journals only' was conducted in PsychInfo. In addition the reference list of the Sowislo and Orth (2013) review article 'Does low-self esteem predict anxiety and depression?' were examined.

The search strategy is presented in accordance with PRISMA guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009) relevant to systematic reviews (Figure 2 & 3). Papers were initially screened for suitability by title. Abstract and/or full-text papers were then screened to determine suitability according to the inclusion and exclusion criteria described in Table 1.

Table 1. Inclusion and Exclusion Criteria

Inclusion criteria relevant to both research questions
• SE measured in child and adolescent samples (Studies included if range of ages included was less than 20 years, with average age less than 18 years)
• SE measured on a validated scale
• A validated measure of anxiety and/or depression or a validated clinical diagnostic interview
• Studies using shortened versions of SE and anxiety/depression measures were included if sufficient information on reliability/validity was provided
• Articles available in English
• Published in a peer-reviewed journal
• Studies presenting information separately or combined for males/females were included
• All anxiety disorders (including social anxiety disorders) and depressive disorders (including dysthymia) were included

Inclusion criteria specific to research question 1
• A validated diagnostic interview or self-report measures must be used to determine the presence of clinically significant anxiety or depression symptoms or to differentiate between the young people with and without the presence of anxiety/ depression symptomatology • Both clinical and community samples of young people who met thresholds were included • Studies must include a comparison group- either categorized by diagnosis or including community control group
Inclusion criteria specific to research question 2
• Longitudinal studies which predict the development of depression/ anxiety symptoms at a later time point from SE measured in samples aged 18 years or younger were included • Studies were included if they predicted anxiety/ depression in emerging adulthood or younger (less than 26 years) • Follow-up completed at least one year following initial assessment
Exclusion criteria relevant to both research questions
• To facilitate the generalisability of the review to a British sample, studies completed outside of Europe, and the USA were excluded • Studies which assessed SE using a small number of questions (<4) as part of a larger questionnaire were excluded • Studies of SE in specific groups (SE in children who have been sexually abused/ with HIV) were excluded as the aim of the current review is to provide a broad overview of the concept of SE • Studies in which SE was a mediator/moderator of another variable not included within the parameters of the study (e.g. attachment) were excluded • Studies using measures of self-concept rather than SE were excluded
Exclusion Criteria specific to Question 1
• Cross-sectional studies which only examine the association/correlation between SE and anxiety and/ or depression were excluded

A second reviewer checked a proportion of the selected papers as a reliability measure to ensure that they met the criteria. Additional papers were also discussed with the second reviewer when it was unclear whether or not they met the criteria. Agreement between the first and second reviewer was reached on all papers.

Data Analysis

It was decided that a meta-analysis would be conducted if appropriate, with a narrative review being conducted if few studies identified. The Systematic Assessment of Quality in Observational Research (SAQOR) criteria (Ross et al., 2011) was used to evaluate the quality of each of paper for the systematic review. SAQOR evaluates studies according to six areas: sample, control/comparison group, quality of exposure/outcome measurements, follow-up, distorting influences, and reporting data. This was adapted to increase relevance to the current review. If a study was determined to be less than 'adequate' then it would be excluded from the analysis. See Table 2 for scoring criteria.

Results

Question 1: Do children and adolescents with clinically significant anxiety disorders and/ or depression also have LSE as measured on a validated psychometric questionnaire?

2931 articles were identified in a search completed in March 2015. Following the initial search, a total of nine articles meeting the inclusion and exclusion criteria for question 1 were identified (Figure 2). A search of the above terms within Google Scholar/Web of Science identified one further article. Reference lists of included articles were also checked but did not reveal any further relevant articles. Following the identification of appropriate studies, a meta-analysis was not considered appropriate due to a lack of comparable studies (e.g. identified studies included a variety of different measures and thresholds for diagnosis and methodologies).

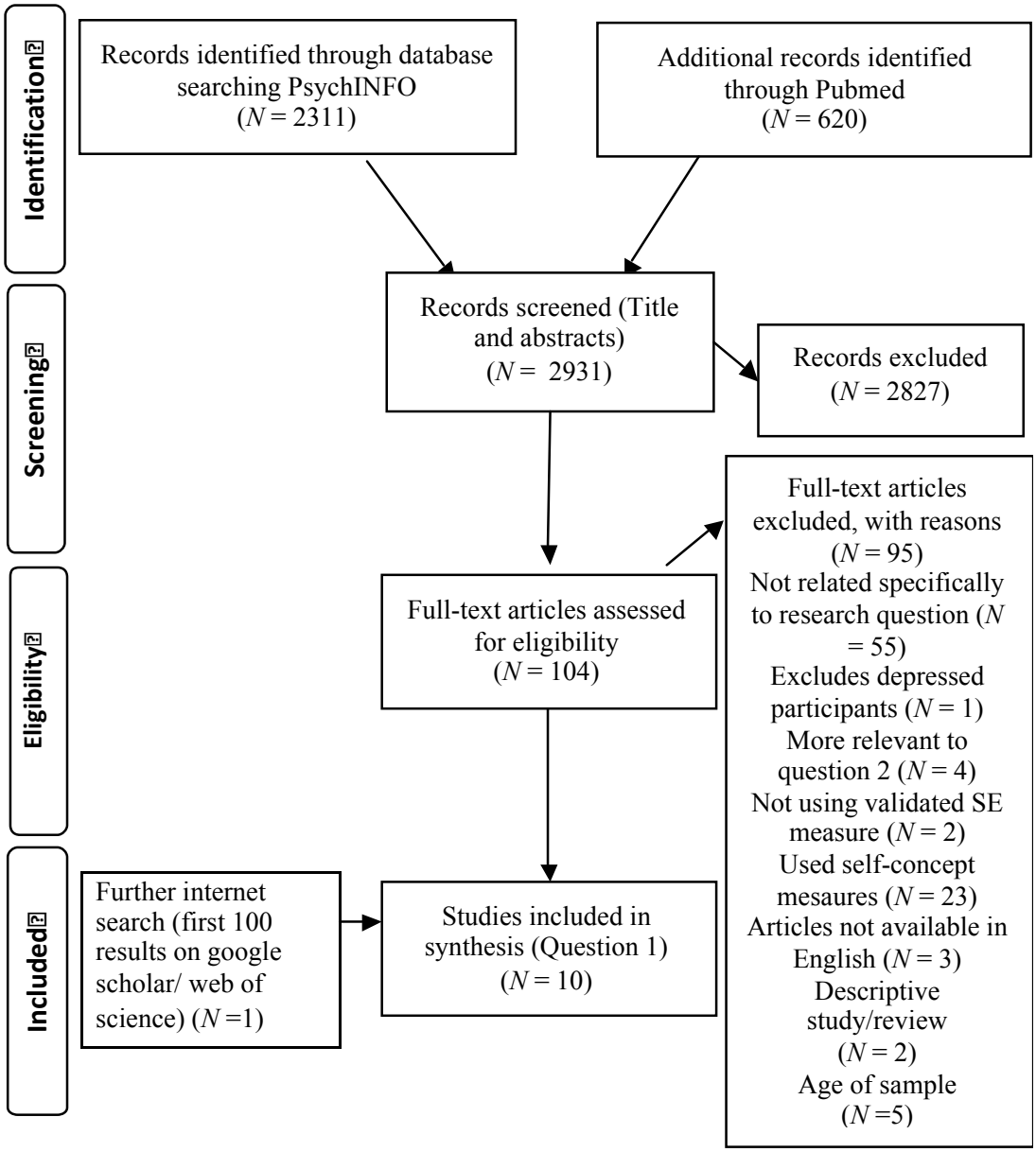

Figure 2. PRISMA diagram: Question 1

In terms of quality according to SAQOR (see Table 2), the majority of studies were deemed to be of adequate quality, with Schreiber et al. (2012) rated as high quality due to the inclusion of matched control group.

Table 2. Systematic Assessment of Quality in Observational Research (SAQOR): Scoring criteria adapted from (Betancourt et al., 2013)

		Sample						Comparison Group				Outcome		Follow-up			Distorting Influences			Data Reporting		Quality
		Representative	Source	Method	Power Calculation	Inclusion criteria	Summary	Unidentifiable	Source	Matched	Summary	Outcome	Summary	Number lost	Analysis	Summary	Intervention	T1 Mental health	Summary	Clarity	Summary	
Q1: Reference	**Design**																					
Beevers et al. (2007)	Longitudinal	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N/A			Y	Y	Adequate
Carbonell et al. (1998)	Observational	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N/A			N/A			Y	Y	Adequate
Guillon et al. (2003)	Observational	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N/A			N/A			Y	Y	Adequate
Isomaa et al (2013)	Longitudinal	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N/A			Y	Y	Adequate
Kazdin (1983)	Observational	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N/A			N/A			Y	Y	Adequate
Orvachel et al (1997)	Observational	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N/A			N/A			Y	Y	Adequate
Schreiber et al. (2012)	Experimental	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N/A			N/A			Y	Y	High
Tripkovic et al. (2015)	Observational	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N/A			N/A			Y	Y	Adequate
Väänänen et al (2014)	Longitudinal	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N/A			Y	Y	Adequate
Trzesniewski et al. (2006)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	N	Y	N	Y	Y	Y	Y	Adequate
Q2: Reference	**Design**																					
Boden et al. (2008)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Adequate
Bohon et al. (2008)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Adequate
Canals et al. (2002)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Adequate
Ferreiro et al. (2011)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Adequate
Orth et al. (2008)	Longitudinal	Y	Y	Y	Y	Y	Y	N/A				Y	Y	Y	Y	Y	N	Y	Y	Y	Y	High
Robertson & Simons (1989)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	N	Y	N	Y	Y	Y	Y	Adequate
Trzesniewski et al. (2006)	Longitudinal	Y	Y	Y	N	Y	Y	N/A				Y	Y	Y	N	Y	N	Y	Y	Y	Y	Adequate

| | | |

Overview of included studies

Studies included one experimental (Schreiber, Bohn, Aderka, Stangier, & Steil, 2012), five longitudinal cohort (Carbonell, Reinherz, & Giaconia, 1998; Beevers, Rohde, Stice, & Nolen-Hoeksema, 2007; Isomaa, Väänänen, Fröjd, Kaltiala-Heino, & Marttunen, 2013; Trzesniewski et al., 2006) and four observational designs both within the community (Tripkovic et al., 2015) and inpatient and outpatient child and adolescent services (Guillon, Crocq, & Bailey, 2003; Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983; Orvaschel, Beeferman, & Kabacoff, 1997). Sample sizes ranged from 40 (Schreiber et al., 2012) to 2070 (Adolescent Mental Health longitudinal cohort in Isomaa et al., 2013; Väänänen et al., 2014). Participants ranged from 5-20 years of age. See Table 3 and 4 for further details.

Community samples of young people (comparisons with healthy controls)

Although the number of studies meeting the criteria for inclusion in the current review is relatively limited, community sample studies indicate that young people with 'clinically significant' internalising disorders have lower SE when compared to healthy controls ($p < .05$; Carbonell et al., 1998; Isomaa et al., 2013; Trzesniewski et al., 2006; Väänänen et al., 2014). Despite a number of potential limitations, namely high rates of attrition and the use of self-report scales as diagnostic measures, analyses from the large scale Adolescent Mental Health Cohort provide relatively robust support for the presence of lower SE scores in young people with 'clinically significant' social anxiety disorder (SAD), depression and combined SAD and depression ($p < .001$; Isomaa et al., 2013; Väänänen et al., 2014). Within this cohort, those with co-morbid difficulties had the lowest reported SE scores ($M = 19.8$; as measured on RSES from 10-40), followed by young people with depression ($M = 23$) and SAD ($M = 27.3$). The difficulties associated with using self-report measures for diagnosis were overcome within a study conducted by Trzesniewski and colleagues (2006) in which mental health difficulties were assessed using an interview schedule administered by a psychologist. Within this large-scale study (Dunedin cohort), those with LSE were twice as likely to have depression as healthy controls ($p < .05$)

Table 3. Overview of studies relevant to Question 1

Reference	Design	Age	Sample	SE Measures	Mental health measures
Beevers et al. (2007) USA	Longitudinal 7 year study	Aged 11-15 at study onset (*M* =13.08, *SD* = .72)	Compared 49 participants who experienced first episode depression during study, with randomly selected 98 control 'never depressed' participants	RSES (adapted version) α = .82-.84	Adapted version of Schedule for Affective Disorders and Schizophrenia for School-Age Children (as per DSM-IV criteria) High inter-rater and test-retest reliability was demonstrated (*k*=1.0)
Carbonell et al. (1998) USA	Longitudinal	Ages 5, 9, 15 and 18	Community 108 adolescents Group 1-Depression (*N* = 24) Group 2-Other Axis 1 diagnosis (*N* = 42) Group 3-No diagnosis (*N* = 42)	RSES α =.86	Diagnosis made according to DSM-III-R criteria
Guillon et al. (2003) France	Observational	*M* = 16.02 years; range: 12-20	Clinical (with healthy controls) 67 adolescent patients (psychotic disorders, *N* = 22; MDD, *N* = 16; anxiety disorders, *N* = 10; anorexia, *N* =2) Healthy control group *N* = 119	CSEI (French translation)	Diagnosis was made according to DSM-IV criteria, based on the consensus of two psychiatrists.
Isomaa et al. (2012) Finland	Longitudinal	Phase 1: *M* = 15.5 Phase 2: *M* = 17.6	Community-Adolescent Mental Health Cohort 2,070 (1609 females, 903 males) adolescents Social Phobia (SP)(*N* = 108)	RSES α = .88 at T1 α = .89 at T2	Depression: Finnish modification of Beck Depression Inventory – Short version (Cut-off score of 8) Social Phobia Inventory (SPIN; cut off score of 24)

			Depression (DEP) (*N* = 107) Combined SP/DEP (*N* = 78)		
Kazdin et al. (1983) USA	Observational	5-13 years	Clinical MDD (N=12) Conduct disorder (*N* = 28) ADHD (*N* = 8) Anxiety (*N* = 4) Adjustment disorder (*N* = 4) Psychosis (*N* = 6) Other mental health disorder (*N* = 4)	CSEI	Bellevue Index of depression (semi-structured interview) Children's Depression Inventory Depression Symptom Checklist (DSM-III)
Orvachel et al. (1997) USA	Observational	Aged 6-17 *M* = 13.1	Clinical Consecutive referrals to outpatient child and adolescent mood disorders clinic 236 young people (58.5%, female) Group 1: MDD (*N* = 129) Group 2: Dysthymia only (*N* = 22) Group 3: MDD and dysthymia (*N* = 22) double depression Group 3: Either depressive disorder not otherwise specified or adjustment disorder with depressive mood (*N* = 29) Group 4: (*N* = 37) Other non-	CSEI α = .91	Schedule for Affective Disorders and Schizophrenia for School Age Children- Epidemiologic Version 4 (K-SADS-E). Children's Depression Inventory

			depressed Axis 1 disorder		
Schrieber et al. (2012) Germany	Experimental		Clinical (with healthy control group) 20 adolescent patients with social anxiety disorder (SAD) recruited in a specialized outpatient centre. Healthy control group (*N* = 20)	RSES	Schedule for Affective Disorders and Schizophrenia for School-Age Children-present and lifetime version (K-SADS-PL) Social Phobia and Anxiety Inventory (SPAI) Beck Depression Inventory (BDI)
Tripkovic et al. (2015) Croatia	Observational	Aged 13	Community 1549 children attending 7th grade in elementary school in city in Croatia	Adapted CSEI α= .77-.79	Child and Adolescent Depression Scale (SDD)
Trzesniewski et al. (2006) USA	Prospective study- Dunedin Multidisciplinary birth cohort Longitudinal study At least 2 year FU	Baseline age= 11 Follow-up ages= 13/15	Community 978 participants (94% of initial cohort; 49% female) completing at least one measure of SE at age 11 (*N* = 812; 78% of the initial cohort), 13 (*N* = 736; 71% of the initial cohort), or 15 (*N* = 866; 84% of the initial cohort)	RSES α = .64, T1	Diagnostic Interview Schedule administered by health professionals with a medical or clinical master's degree.
Väänänen et al. (2014) Finland	Longitudinal Adolescent Mental Health Cohort	T1: *M* = 15.5 T2: *M* = 17.6	Community 9th grade pupils responding to a survey conducted in 2002–2003 (T1) and to a 2-year	RSES (Finnish translation)	Beck Depression Inventory (RBDI; Finnish translation). Cut-off point of 8 was used to predict a diagnosis of depression with good sensitivity and

(AMCH)	follow-up survey in 2004–2005 (T2) (N = 2070, 54.5% girls)	specificity. Social Phobia Inventory (SPIN) Cut-off score of 24 has 81.8% sensitivity and 85.1% specificity for a diagnosis of SP

Note. RSES=Rosenberg Self-Esteem Scale, CSEI= Coopersmith Self-Esteem Inventory, T1=Time 1, T2=Time 2

Several further smaller-scale community studies, also using diagnostic interviews (according to DSM-III, DSM-IV), provide further evidence that young people with a diagnosis of major depressive disorder (MDD) have significantly lower SE than never-depressed controls (Beevers et al., 2007; Carbonell et al., 1998; $p < .001$, $p < .05$ respectively).

Regarding the prevalence of co-occurring LSE and mental health difficulties, Tripokovic and colleagues (2015) found that approximately 40% of young people with LSE as measured on the Child and Adolescent Depression Scale, met the criteria for clinically significant depression. Similarly, Isomaa and colleagues (2013) found that 41-51% of young people with LSE scored above the clinical cut-off for depression, while 22-36% scores met the criteria for SAD. This suggests that although the presence of LSE increases the likelihood that a young person will also a have clinically significant internalising disorder, it draws caution to over-emphasising the association between internalising disorders and LSE across young people, particularly in males with anxiety.

Clinical samples compared to healthy controls

Similar patterns emerge when considering samples recruited through clinical settings. In a comparison of young people hospitalized on an in-patient psychiatric ward to healthy controls, SE was shown to be significantly lower in the clinical population, even when controlling for age, gender and socio-economic status ($p = .0001$; Guillon et al., 2003). It was also found that those with depression scored lower on SE than those with anxiety disorders although this difference did not reach significance.

In a small but well-designed study of social threat activation, 20 patients with a diagnosis of SAD, recruited through an outpatient specialist clinic ($p < .001$; Schreiber et al., 2012) were compared to healthy matched controls. Those with SAD (eight of whom had co-morbid depression) were found to have an average SE ($M = 23.6$) within the low range (< 25; Isomaa et al., 2013).

Exclusively clinical samples (diagnosis specific)

With reference to samples recruited exclusively through child services, co-morbidity has been shown to increase the likelihood that a young person will also report having LSE. Orvachel and collegues (1997) found that, within a sample of young

people recruited through an outpatient child and adolescent mood disorders program, depression severity (e.g. meeting criteria for double depression –MDD and dysthymia) was associated with the lowest SE scores (*M* = 20.5) on the Coopersmith Self-Esteem Inventory (CSEI; Coopersmith, 1967), with young people meeting the criteria for other Axis 1 disorders (*M* = 32.3), and MDD (*M* = 27) evidencing higher scores. Normative data for the overall SE on the CSEI suggests an average score of 63.5 (*SD* = 15) in 8-16 year olds highlighting how comparatively low SE scores in all disorder groups were found to be.

In contrast, Kazdin and colleagues (1983) did not find a difference between a small clinical sample of depressed (as measured on older DSM-III criteria) and non-depressed young people (including those making criteria for psychosis) recruited through an inpatient Children's Psychiatric Intensive Care Unit, although the scores of both samples were low comparative to normative data (e.g. Mean CSEI score = 33.4 in 'depressed group').

Table 4. Findings relevant to Question 1

Reference	Critique	Findings	Size of effect or p value
Beevers et al. (2007)	Good test-re-test reliability ($k > .80$) Maximum likelihood estimation used	The depressed group had significantly lower SE than the never-depressed group ($F = 19.34$***, $p < .001$)	$p < .001$
Carbonell et al. (1998)	Small samples in different groups Older diagnostic criteria (DSM-III-R)	Adolescents with MDD had a significantly lower mean SE score than adolescents in the no diagnosis group. MDD- $M = 28.29$ ($SD = 4.45$) Other diagnosis- $M = 30.74$ ($SD = 4.83$) No diagnosis- $M = 31.93$ ($SD = 4.20$) F Value= 4.98** MDD < No diagnosis ($p < .05$)	$p < .01$
Guillon et al. (2003)	Small numbers in each diagnostic category (only 16 participants with MDD) Used healthy comparison group but this was not matched	Controlling for age, gender and socio-economic status, self-esteem was significantly higher in the control group than in the clinical population ($p = .0001$). Adolescents with a diagnosis of MDD had lower SE scores ($M = 19.88$) than those with anxiety disorders ($M = 23.30$), psychosis ($M = 24$), or personality disorders (21.27 ±6.71). Differences between disorder type did not reach significance.	$p = .0001$
Isomaa et al. (2012)	Used validated scales with cut-offs to determine presence of anxiety/ depression Using cut-off to determine whether criteria met for LSE	Participants with LSE differed significantly from participants with high SE regarding depression and social anxiety symptoms at both time points (T1: $F(2,1134) = 339.61$, $p < .001$; T2: $F(2,865) = 68.35$, $p < .001$	$p < .001$
Kazdin et al. (1983)	Small number. Two staff independently completed the diagnoses. Agreement on Axis I diagnosis was relatively high (Kappa	SE scores did not differ according to the presence of depression ($M = 32.5$) vs no depression (other diagnosis) ($M = 33.4$).	*ns*

	= .69). Where there were disagreements, the case was reviewed to reach consensus. The child was also interviewed and assessed independently by different assessors within 10 days of admission		
Orvachel et al. (1997)	Small sample Report an inclusion of 6-17 years, wide age range Unclear whether CSEI completed by younger participants Relevant sample with all meeting DSM criteria for clinical sample	Double depression group evidenced the lowest self-esteem (M = 21.5) and the non-depressed group the highest (M = 37.2). All groups in the sample had considerably lower scores on the CSEI than normative samples.	$p < .05$
Schreiber et al. (2012)	Although a clinical sample was assessed, the modest sample size reduces the power to find possible differences	Adolescents with SAD displayed significantly lower explicit self-esteem than healthy controls SAD *M(SD*) = 23.6(7.0) Control Group *M(SD)* = 35.4(3.6) F= 43.3***, $p < .001$	$p < .001$
Tripkovic et al. (2015)	Self-report measures used to indicate presence of depression. Scale based on DSM-IV criterion. Use of decile ranks.	Statistically significant association between LSE and clinically significant depression was found (χ2=852)	$p < .001$
Trzseniewski et al. (2006)	Retention rate= 96% of participants	Adolescents with LSE were twice as likely to have depression than non-depressed young people (OR = 2.0)	$p < .05$
Väänänen et al. (2014)	Although large baseline sample, number of adolescents suffering from social phobia (SP) and depression	RSES scores were significantly lower in all disorder groups compared to the no SP/DEP group at both age 15 and 17 in both sexes. When the disorder groups were compared, current SE was highest in the SP group	$p <.001$

	(DEP) was quite low Lack of control for other disorders (but did control for externalizing disorders) Different methods of FU- internet/ postal may have affected responses	in both sexes at both ages. No SP/DEP- $N = 1723$, $M = 30.7$ SP- $N = 108$, $M = 27.3$*** DEP- $N = 107$, $M = 23$*** Com- SP/DEP $N = 78$, $M = 19.8$ *** ***= Statistical difference between disorders and the No SP/DEP group

Note. RSES=Rosenberg Self-Esteem Scale, CSEI= Coopersmith Self-Esteem Inventory, FU= Follow-up, T1=Time 1, T2=Time2

Question 2. Does low self-esteem in childhood and adolescence (18 years of age and younger) predict the development of depressive and anxiety symptomology in adolescence and young adulthood?

A total of 106 articles were identified, with eight articles meeting the relevant inclusion criteria (Figure 3).

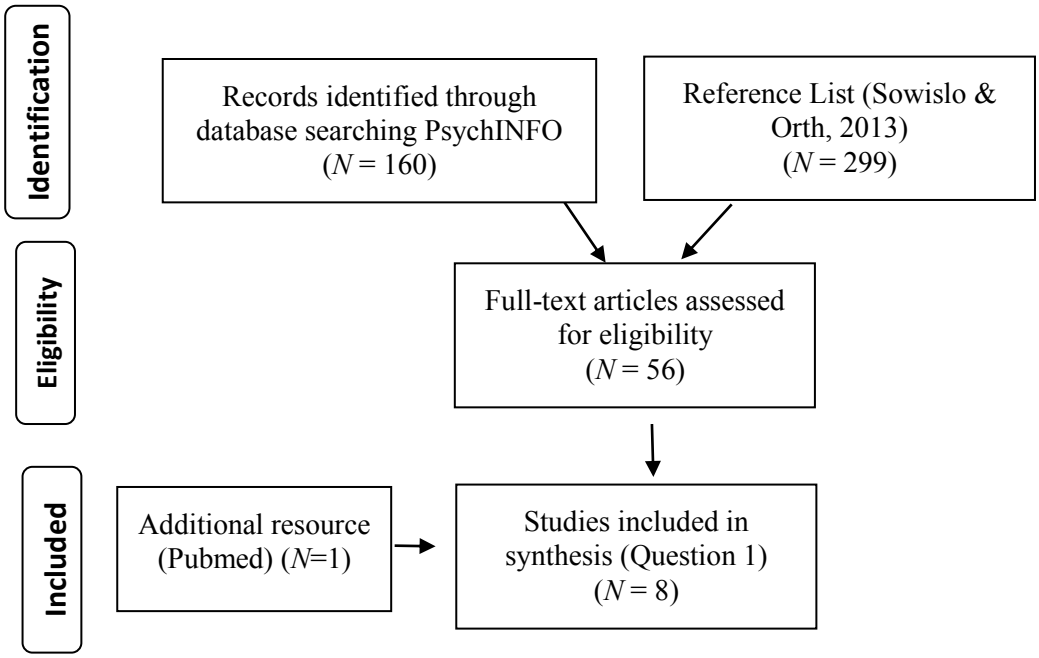

Figure 3. PRISMA diagram: Question 2

In terms of the analysis, studies relevant to predicting later symptoms of anxiety and depression will be presented separately. Further details on the study design, sample size and measures relevant to Table 5, with details on findings available in Table 6.

Overview of studies

Eight longitudinal studies met the inclusion criteria for the second part of the review. Studies included prospective longitudinal community samples of young people (e.g. Boden, Fergusson, & Horwood, 2008; Ferreiro, Seoane, & Senra, 2011; van Tuijl, de Jong, Sportel, de Hullu, & Nauta, 2014), with one study recruiting part of the sample from drug and alcohol services (Robertson & Simons, 1989) and another from an exclusively adolescent female sample (Bohon, Stice, Burton, Fudell, & Nolen-Hoeksema, 2008) with the aim of accessing samples with an increased likelihood of internalising symptoms.

Table 5. Overview of studies relevant to Question 2

Reference	Design	Age	Sample Details	SE Measures	Mental health measures
Boden et al. (2008) New Zealand	Longitudinal – Christchurch Health and Development Study- community Three year plus FU	Data on cohort collected at birth, 4 months, 1 year, at annual intervals to age 16 years, and at ages 18, 21, and 25 years.	Community Birth cohort of 1,265 children born in Christchurch, New Zealand in mid-1977.	CSEI α = .87	Diagnostic Interview Schedule for Children (DISC) based on DSM-III-R symptom criteria
Bohon et al. (2008) USA	Longitudinal study Over one year	Age range 15-18 *M* =16.5	Community 496 adolescent females	RSES (adapted) T1 α = .84	Schedule for Affective disorders and schizophrenia for school-age children (KSADS).
Canals et al. (2002) Spain	Longitudinal 6 year follow up	Assessed annually from 11 until 18	Community 199 (100 males, 99 females) Group 1: MDD Group 2: MDD and dysthymia Group 3: a group of all depressive disorders	RSES Culture-Free Self- Esteem Inventory for Children	First stage: State-Trait Anxiety Inventory for Children (STAIC: Spanish version) Children's Depression Rating Scale- Revised (CDRS-R) Second stage: Spanish version of Beck Depression Inventory Culture-Free Self-Esteem Inventory (Spanish version)
Ferreiro et al.	Longitudinal	T1	415 females and 413	RSES	Child Depression

(2011) Spain	2 year follow up	*M* = 12.8 T2 *M* = 14.9	males attending state schools in Spain	(Spanish version) α = .82 at T1 α = .86 at T2	Inventory (CDI) Cut-off score of 19 α = .85 at T1 α = .88 at T2
Orth et al. (2008) USA	Longitudinal. Part of the National Longitudinal Survey for Youth- 2year FU	*M* = 15.5	Study 1: Data available for 2094 participants at T1, 2710 at T2	RSES	Centre for Epidemiological Studies Depression Scale (CES-D)
Robertson & Simons (1989) USA	Longitudinal One year FU	Participants aged 13-17 years of age	Community drug treatment services (*N* = 199; FU, *N* = 144) and age/sex matched community sample (random dialing) (*N* = 114; FU, *N* = 100)	RSES α = .76	Adolescent depression inventory α = .78
Trzesniewski et al. (2006) USA	Prospective study-Dunedin Multidisciplinary birth cohort Longitudinal study At least 2 year FU	Baseline age= 11 Follow-up ages= 13/15	Community 978 participants (94% of initial cohort; 49% female) completing at least one measure of SE at age 11 (*N* = 812; 78% of the initial cohort), 13 (*N* = 736; 71% of the initial cohort), or 15 (*N* = 866; 84% of the initial cohort)	RSES α = .64, T1	Diagnostic Interview Schedule administered by health professionals with a medical or clinical master's degree.

Van Tuijl et al. (2014) The Netherlands	Longitudinal- Large scale study 'Prevention of adolescent Social and Test anxiety' 2-year FU	*M* = 13.14, *SD* = .75	Community 1641 first and second year pupils in the Netherlands (46.7% male)	RSES – Dutch version α = .91 at both time points	Revised child anxiety and depression scale (RCADS) α = .84, .79, SAD and MDD respectively

Note. RSES=Rosenberg Self-Esteem Scale, CSEI= Coopersmith Self-Esteem Inventory, T1=Time 1, T2=Time 2

The age range for baseline participants was 11-18 years, with participants in the follow-up stages ranging from 13-26 years (defined as emerging adulthood by Arnett, 2000). Follow-up lengths ranged from 1 to 6 years, with some of the studies including multiple time points (e.g. Orth, Robins, & Roberts, 2008). All studies were deemed to be at least of adequate quality, with two studies meeting the 'high quality' criteria as a result of reporting statistical power (Orth et al., 2006), and controlling for the impact of treatment by excluding those who had treatment prior to follow-up (Van Tuijl et al., 2014).

Predicting follow-up symptoms of depression from LSE in adolescence

A number of studies investigating the association of LSE with the development of anxiety and depressive symptomatology in later adolescence and emerging adulthood have found a statistically significant association between SE in childhood and later mental health outcomes (Boden et al. 2008; Orth et al., 2008; Van Tuijl et al., 2014). These studies reported a significant association, albeit small effect, of time 1 SE in predicting time 2 depressive symptomatology (e.g. r = .-08 in Orth et al., 2008; Study 1). Trzesniewski and colleagues (2006) demonstrated a similar significant effect in that adolescents with LSE were 1.26 times more likely to develop MDD by the age of 26 than healthy adolescents. These significant associations held when controlling for baseline depression (Orth et al., 2008; Trzesniewski et al., 2006, Van Tuijl et al., 2014), and socio-economic status and IQ (Trzesniewski et al., 2006).

There are a number of additional confounding variables that are likely to influence the longitudinal relationship between LSE and depression. Boden et al. (2008) found that although SE at age 15 was significantly associated with depression and anxiety disorder at ages 18, 21 and 25, this effect was reduced to non-significance when controlling for a number of further co-occurring psychosocial risk factors including attachment difficulties, previous mental health difficulties, physical and sexual abuse (p > .02; Boden et al, 2008). This suggests that the picture linking the LSE and later mental health problems is complex and multi-faceted, and likely to be influenced by the accumulation of multiple risk factors.

A number of further studies have negated to find any significant association (p > .05) between LSE and the development of depression in later adolescence and emerging adulthood (Bohon et al., 2008; Ferreiro et al., 2011; Robertson & Simons,

1989) or to predict the onset of a range of depressive disorders or MDD and dysthymia at 18 from SE measured annually (only SE at age 15 in females predicted the onset of MDD at the age of 18; Canals, Domènech-Llaberia, Fernández-Ballart, & Martí-Henneberg, 2002). These studies controlled for baseline depression, with a number of additional factors controlled for including attributional style (Bohon et al., 2008), trait anxiety and personality traits (Canals et al., 2002). These studies contained smaller sample sizes then those previously discussed which are likely to reduce the power to detect a small effect.

Predicting follow-up anxiety from LSE in adolescence

Fewer studies exist which meet the inclusion criteria and examine the effect of LSE and its association with the development of anxiety symptomatology in adolescence and emerging adulthood. In a study using the revised anxiety and depression scale (RCADS) completed by Van Tuijl et al. (2014) a significant association ($p < .01$) was found with LSE predicting follow-up SAD symptoms. Interestingly, Trzesniewski et al. (2006) found that adolescents with LSE were 1.6 times more likely to develop an anxiety disorder, a higher likelihood than was found in the depressed sample in the same study.

Boden and colleagues (2008) found that SE was predictive of the development of an anxiety disorder in early adulthood ($B = -.11$, $p < .0001$), although this was reduced to non-significance ($B = -.02$, $p > .05$) when controlling for other associated psychosocial child factors including gender, anxiety and shyness, and neuroticism.

Table 6. Findings relevant to Question 2

Reference	Attrition rates	Findings	Significance level
Boden et al. (2008)	Sample size ranged from 913 to 936, representing between 72 and 74% of the initial cohort.	SE at age 15 was significantly ($p < .001$) associated with outcomes at ages 18, 21, and 25. Lower levels of SE were associated with higher rates of depression and anxiety. This was reduced to non-significance when controlling for covariates.	Prior to adjusting for co-variates: Depression, $B = -.09$, $p < .001$ Anxiety Disorder, $B = -.11$, $p < .001$ $p > .05$ when adjusting for confounding variables Depression $B = -.01$ ($p > .03$) Anxiety $B = -.02$ ($p > .02$)
Bohon et al. (2008)	Attrition averaged 1-2% annually ($N = 480$-488) for this study	Baseline SE did not have unique predictive value in predicting change in depressive symptoms from baseline to follow-up	$\beta = -.05$, $p = .122$, *ns*
Canals et al. (2002)	Drop-out rate was 62.7%	Regression model: Only LSE at 14 was a risk factor of depression at 18 ($OR = 0.8$, 95% $CI = 0.65$-0.97, $p = .03$). Within available tables, SE was not found to be a unique predictor variable for 'all depressive disorders' or 'depression and dysthymia' at any age	$p > .05$ Only one significant finding reported at $p < .05$, LSE at 14 in females risk factor for MDD at 18
Ferreiro et al. (2011)	86.34% took part in FU	T1 self-esteem was not a significant predictor of T2 depressive symptoms	$\beta = -.09$ p >.01 Significant interaction effect with gender
Orth et al. (2008)	Complex pattern of missing data due to funding. Overall, 15% of data missing due to drop out, and 31% missing due to planned missing data.	LSE predicted subsequent levels of depression. SE at age 15 helped to predict depression at age 17, and SE at age17 predicted depression at age 19	Study 1: Standardized coefficients = -.09 to -.10, $p < .01$ The effect of SE on depression was $r = -.08$, indicating a small effect

	No significant differences were found between those who dropped out and those who didn't.		
Robertson & Simons (1989)	30.7% of participants were not available at follow-up	Self-esteem at baseline had no significant association with depression at follow-up, when baseline depression was controlled for	Standardized regression coefficient = -.05, (p = .46)
Trzseniewski et al. (2006)	Retention rate= 96% of participants	Participants with LSE were 1.26 times more likely to meet the criteria for MDD at age 26 Participants with LSE were 1.6 times more likely to meet the criteria for anxiety disorder at age 26	$p < .05$ *OR* = 1.26-1.60
Van Tuijl et al. (2014)	35% of participants (N = 576) were not available at follow-up. Those who dropped out had low SE, and higher depression symptoms than those who took part at both time points. Multiple imputation was used to account for missing data.	LSE was predictive of relatively high MDD and SAD symptomology at follow up, even when controlling for baseline symptomology. Only 32 participants developed MDD	*B = .04 (MDD), p < .01* *B* = .06 (SAD), $p < .01$

Note. RSES=Rosenberg Self-Esteem Scale, CSEI= Coopersmith Self-Esteem Inventory, FU= Follow-up.

Discussion

The overall aim of this review was to examine LSE and internalising mental health disorders in young people. Although relatively few studies investigating 'clinically significant' anxiety and depression were identified, the located studies consistently supported the co-occurrence of LSE and internalising disorders in this age group. This was found to be particularly true for young people with depression and co-morbid difficulties. From the research reviewed, there appears to be less evidence for the association between reported LSE in childhood and adolescence and anxiety/depression in later adolescence/emerging adulthood.

Association between LSE and anxiety/depression

Evidence for the co-occurrence of LSE and anxiety and/or depression was found in young people recruited through the community (e.g. Carbonell et al., 1998; Isomma et al., 2013; Väänänen et al., 2014) and inpatient and outpatient child mental health services (Kazdin et al., 1986; Schreiber et al., 2012). A pattern emerged in relation to specific diagnoses. Young people with depression tended to report lower SE than those with anxiety disorders, while those with co-morbid mental health difficulties were found to have the lowest SE (Guillon et al., 2003; Isomaa et al., 2013; Orvachel et al., 1997; Väänänen et al., 2014). The additive effects of co-morbid psychiatric diagnoses particularly when depression is present, has also been reported in adult samples (Silverstone & Salsali, 2003). These findings are consistent with the wider literature of correlational studies exploring the relationship between SE and mental health difficulties in young people (Battle, 1978; Byrne, 2000; Plunkett et al., 2007).

Association between LSE and internalising disorders in later adolescence/ emerging adulthood

Evidence for the value of LSE in predicting the development of anxiety and depressive symptomatology in adolescence and emerging adulthood is mixed, with some studies demonstrating a significant but relatively small effect (Trzesniewski et al., 2006) and others negating to find any significant association (Bohon et al., 2008; Robertson & Simons, 1989). Although it is important to acknowledge the major impact that even small effects can have over time and that adult mental health outcomes are multi-determined in their nature (Evans, 1994), it is likely that the

inclusion of different confounding variables, sample sizes (with the smaller scale studies less likely to find a small effect), and the relative instability of SE in adolescence (Trzesniewski, Donnellan, & Robins, 2003) are implicated in this finding.

The identified research points to a complex and multi-factorial relationship between self-esteem and mental health outcomes in later adolescence and emerging adulthood. Boden and colleagues (2008; p.319) propose that 'the effects of self-esteem during adolescence on later developmental outcomes are weak, and largely explained by the psychosocial context within which self-esteem develops', including sexual abuse, family changes, physical punishment, and early mental health difficulties. Based on the reviewed literature, it remains that evidence for the vulnerability model in childhood and adolescent is less established than for adults (Sowislo and Orth, 2013).

Strengths and limitations of the review

This study provides a systemic review of SE in young people with clear, pre-determined inclusion and exclusion criteria and a structured assessment of study quality. The inclusion of a second reviewer to reach consensus where there was uncertainty around particular studies also adds to the reliability of the review.

Certain limitations must also be acknowledged. The current review only included articles published in English and may have been influenced by publication bias or missed relevant articles published in other languages (as described in Müller et al., 2013).

Clinical implications

The reviewed literature suggests that young people, particularly those with co-morbid anxiety and depression are also likely to have LSE. With regard to clinical practice this suggests that further research into the utility of Fennell's (1997) model of LSE for this client group is indicated. This model provides a trans-diagnostic framework for making sense of both anxiety and depressive symptoms, while emphasizing a common pathway across disorders. As the stability of SE increases during adolescence and emerging adulthood, utilizing this model as a framework for intervention at an early stage may be appropriate at an age when SE may be more amenable to change. We know that LSE more generally across the lifespan

(Sowislow & Orth, 2013) is linked to anxiety and depression in adulthood, therefore the skills may be useful in circumventing future difficulties. It is worth noting that, as described by Boden and colleagues (2008) this intervention should not be to the neglect of other contextual factors that may contribute to LSE.

Within the framework of a meta-analysis, Haney and Dulak (1998) propose that programs focusing on SE/self-concept are more successful when delivered to young people with rather than without mental health difficulties and when theoretically-driven. Although to date there are no evaluations of Fennell's treatment model for LSE in young people, the findings of Haney and Dulaks (1998) meta-analysis study are promising.

It is also worth noting that drawing conclusions from studies that use a variety of diagnostic and SE measures can be challenging. In quantifying SE, some studies used adapted and translated versions of the gold-standard RSES (Carbonell et al., 1998; Isomaa et al., 2012), which others used the CSEI (Guillon et al., 2003; Orvachel et al., 1997). A number of studies relied exclusively on validated measures to determine clinically significant symptomatology (e.g. Beck Depression Inventory, both short versions and translations, and Social Phobia Inventory used in Isomaa et al., 2012), while others relied on diagnostic interviews (e.g. Schedule for Affective Disorders (K-SADS) used in Schreiber et al., 2012). Within the literature, it is generally regarded that diagnostic interviews provide more reliable and valid indications of clinically significant internalising disorders (Orth et al., 2008). The multitude of SE measures and inclusion of confounding variable creates an added complexity. For example, only one study controlled for intervention prior to follow-up (Van Tuijl et al., 2014).

Overall, the sample sizes of young people with clinically significant anxiety and depression were relatively small (ranging from 12 with MDD in Kazdin et al., 1984 to 129 in Orvachel et al., 1997 and 4 meeting the criteria for anxiety disorder in Kazdin et al., 1984 to 108 with SAD in Isomaa et al., 2013). Retention rates for follow-ups differed amongst the included studies, with samples within the Dunedin Multidisciplinary Health and Development Study demonstrating excellent retention (86% of initial cohort completed measures at 15; Trzesniewski et al., 2006) but large amounts of missing data reported in other studies due to a combination of participant drop out and planned budgetary cuts (e.g. Orth et al., 2008; Van Tuijl et al., 2014). In addition, a number of studies found differences on the variables of interest

between those who dropped out and others at baseline. For example, Van Tuijl et al. (2014) found that those who dropped out were more likely to report the symptoms of interest (i.e. low SE, and higher depressive symptomatology) pointing to the challenges of undertaking large-scale research in this area.

It is also important to acknowledge the overlap between LSE and depression (e.g. feelings of worthlessness), and the corresponding measurement tools. Some authors (e.g. Watson, Suls, & Haig, 2002) argue that LSE and depression represent the same construct. However, Orth and colleagues (2008) point to the importance of distinguishing between LSE and depression. This conclusion is based on the rationale that cross-sectional correlations between these constructs in adolescent populations have been found to be as low as -.36 (Roberts & Gamble, 2001), that SE appears to be more stable than diagnosable mental health disorders (Trzesniewski et al., 2003) and a relationship between depression and SE has been shown to exist despite controlling for prior levels of each construct.

Future Directions

Taking the small number of studies identified for the current review into account suggests that further larger-scale studies of young people with clinically significant anxiety and depression within child and adolescent mental health services (CAMHS) is warranted. This would be beneficial to add to the weight of evidence presented in the current review. Given the introduction of routine outcome measures in services in the UK, data could potentially, with the introduction of an additional self-esteem measure, be collected as part of routine clinical practice. This could be implemented with the aim of evaluating the outcomes of young people with co-morbid internalising disorders and LSE and evaluating whether Fennell's trans-diagnostic model shows as promising results as is beginning to emerge in adults (Waite et al., 2012). A number of smaller scale case series may be helpful to first establish whether a larger trail of CBT is indicated.

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University of Bath

Doctorate in Clinical Psychology

Service Improvement Project

Using carer feedback to improve family information sessions within North Somerset Early Intervention for Psychosis service

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Abstract

Background: Clinical guidance recommends that multi-family psychoeducation groups) should be offered as part of the stepped-care model of intervention in early intervention for psychosis services. This results from recognition of the important role that families play in supporting the recovery of service users experiencing a first episode of psychosis.

Aims: This study aimed to evaluate and improve a series of multifamily information sessions within the North Somerset Early Intervention for Psychosis Team.

Methods: Following the initial running of a multifamily psychoeducation group (Group 1), telephone interviews were conducted with six family members who attended to evaluate and identify recommendations for the improvement of the group. This feedback was used to inform the format and content of a second running of the group (Group 2). Three further participants provided evaluative qualitative feedback on this revised group.

Results: Following collection of feedback from Group 1, four key themes were identified; the positive aspects of group attendance (e.g. receiving relevant information, opportunity to meet the team and other families), challenges of groups (e.g. accommodating the needs of different families), impact of caring (e.g. feeling isolated and unknowledgeable) and recommendations for improvement (e.g. additional content for siblings, simplifying information). This information was used to develop Group 2, which was adapted to make the information more family-friendly (e.g. simplifying information), with the inclusion of some further information.

Conclusions: The positive feedback received from those who attended the group supports the continued use of family information sessions within the service. The use of feedback and the development of this aspect of the service were perceived positively by the team.

Keywords: psychoeducation, early intervention for psychosis, family, group, carer involvement

Using carer feedback to improve family information sessions within North Somerset Early Intervention for Psychosis service

The important role that families play in caring for and facilitating recovery in individuals experiencing their first episode of psychosis (FEP) is increasingly recognised (Burbach, 2012). Numerous challenges are experienced by families taking on this role, with research indicating that families often feel unconfident in their knowledge of different aspects of mental illness, medication, and mental health services (Lowenstein, Butler, & Ashcroft, 2010; Sin, Moone, & Newell, 2007). As a result supporting, providing information and working collaboratively with families are viewed as essential components of Early Intervention for Psychosis (EIP) services. This fits with the Triangle of Care framework which emphasises greater collaboration between service users, families, and services (Worthington & Rooney, 2010).

Clinical guidance recommends that psychoeducation groups for multiple families (often referred to as multifamily psychoeducation groups; MFPG's) should be offered as part of the stepped-care model of intervention in EIP services (Addington, McCleery, & Addington, 2005; Cohen, Glynn, Hamilton, & Young, 2010; Initiative to Reduce the Impact of Schizophrenia [IRIS], 2012). Previous research has demonstrated the effectiveness of such groups as an adjunct to individual engagement (McFarlane, Dixon, Lukens, & Lucksted, 2003; Petrakis, Oxley, & Bloom, 2013). Research has highlighted the effectiveness of MFPG's in increasing families' knowledge and understanding of psychosis (Mullen, Murray, & Happell, 2002; Petrakis et al., 2013), improving knowledge of, and willingness to engage with, services (Dixon et al., 2014; Petrakis et al., 2013), reducing stigma and guilt (Dixon et al., 2014), reducing levels of distress by providing a safe environment to ask questions (Gleeson, Jackson & Burnett, 1999), reducing isolation through the multi-family approach (Petrakis et al., 2013; Mullen et al., 2002; Riley et al., 2010) and in keeping with the ethos of the recovery model, fostering hope (Glynn, Cohen, Dixon, & Niv, 2006).

The Early Psychosis Prevention and Intervention Centre (EPICC) model for family psychoeducation is most commonly used as a basis for course design (Glentworth & Reed, 2010). It has been suggested that the content should address issues around diagnostic uncertainty, misconceptions about mental illness (through the stress-vulnerability model), exploration of treatment options (bio-psychosocial

model), and relapse prevention (Edwards, Francey, McGorry, & Jackson, 1994; Gleeson et al., 1999). Groups differ in terms of duration, structure and whether the service user attends or not (Lucksted, McFarlane, Downing, Dixon, & Adams, 2012; Petrakis et al., 2013; Riley et al., 2010). Although variation exists amongst groups, one of the noted advantages of this approach is that it offers the opportunity for families to express their feelings, to develop a shared understanding and to have a forum for gathering practical and emotional support (Burbach, 2012).

With collaborative and active engagement in mind, best practice guidance advises that carers should have the opportunity to be involved in the planning of groups (Division of Clinical Psychology [DCP], 2010). In keeping with this, the aim of this project is to use carer feedback to evaluate, develop and improve a MFPG, which the North Somerset (NS) team aims to implement as a rolling programme within the service.

Aims

1. To establish whether MFPG's meet the needs of families in the NS service
    - Does a MFPG meet the needs of families of young people presenting for the first time with psychosis?
    - Which needs does it meet and how?
2. To identify recommendations for the improvement of the group
    - Can the group be developed to better address the needs of this client group?
    - What are the barriers which exist in relation to families attending the group and how can these be overcome?

Group 1

The first four-session MFPG was delivered in February/March 2014 (henceforth referred to as Group 1). The format and content for Group 1 was based on a similar group run by the South Gloucestershire team (see Table 1). Each session was 1.5-2hours long, facilitated by different members of the team and contained a 15-minute break for refreshments/to speak individually to staff or other family members. This project will involve the evaluation of this group, and the development and re-evaluation of a subsequent group (henceforth referred to as Group 2; run in March/April 2015).

Table 1. Family information group: Course content- Group 1

Week	Content
1	Introduction to Early Intervention
	What is psychosis?
	The stress-vulnerability model
	Formulation
2	Physical Health
	Medication
	Substance Misuse/ Dual Diagnosis
3	Cognitive Behavioural Therapy
	Family Work
	Art Psychotherapy
	Carers and their role
4	Relapse Prevention and Early Warning Signs
	Stress Management
	Recovery Approach & Social Interventions
	Social Inclusion & Employment

Method

Design

Qualitative, semi-structured telephone interviews were used to gather detailed information on participant's experiences of the group and to elicit recommendations for improvement. The design of the study is described in the phases below.

- Phase 1: Feedback gathered from participants who attended Group1
- Phase 2: Review and implementation of recommendations in consultation with the team to develop Group 2
- Phase 3: Feedback gathered following Group 2
- Phase 4: Comparative feedback elicited from team member who facilitated both groups

The groups were evaluated, reflected upon and recommendations devised in the context of the new learning achieved. This design fits with the recommended

'act- evaluate-reflect-learn-act' cycle (DCP, 2010) for involving service users and carers in service improvement.

Participants

Participants for this project were families who attended and provided feedback after attending at least one session of either Group 1 or Group 2.

Group1

In total, nine families attended at least one session (comprising of 19 individuals; two service users, two siblings and 14 parents). As this was the first time this type of group had been set up within the service, many of the families who attended were within the second/third year of their involvement with the service. Attendance numbers are displayed below.

Table 2. Attendance at group 1

Session	No. of individuals	No. of families represented
1	9	5
2	13	7
3	6	4
4	10	5

Six family members took part in follow-up telephone interviews. Participants included six parents (four males, two females; representing five families), representing 55% of families who attended at least one session. Table 3 shows sessions attended by each of these six participants.

Table 3. Sessions attended by participants contributing to Group 1 Feedback

Participant ID	Session 1	Session 2	Session 3	Session 4
P1	✓	✓	✓	✓
P2	✓	✓	✓	✓
P3				✓
P4	✓	✓	✓	
P5	✓	✓	✓	
P6		✓	✓	✓

Group 2

A total of four families attended (an average of five family members at each session).

Table 4. Attendance at Group 2

Session	No. of individuals	No. of families represented
1	7	4
2	7	4
3	6	3
4	8	4
5	3	1

Two attendees from Group 2 (sibling, parent) took part in follow-up telephone interviews (representing 50% of families who attended at least one session). A further participant (parent) wished to contribute written feedback to the project.

Table 5. Sessions attended by participants contributing to Group 2 feedback

Participant ID	Session 1	Session 2	Session 3	Session 4	Session 5
P7	✓		✓	✓	✓
P8	✓	✓	✓	✓	
P9	✓	✓	✓	✓	

Measures

A semi-structured interview schedule (see Appendix H) was adhered to for the telephone interviews. Questions prompted responses to the following areas of interest 1) information needs 2) support needs 3) stage at which group would have been most helpful 4) usefulness of group 5) opinions on attending group with service users 6) barriers 7) location and time.

Procedure

- University of Bath (reference 14-148) ethical approval and Avon and Wiltshire Partnership (AWP) service evaluation approval (reference 2014.E002) was sought prior to feedback collection.

- Phase 1. Data collection following Group 1

  Invitation letters (Appendix C), information sheets (Appendix E), consent forms (Appendix G) and stamped addressed envelopes (SAE's) were posted to families who attended Group 1. Follow-up telephone calls were made two weeks following this offering the opportunity to take part in a telephone interview or focus group. For the convenience of families, it was decided that telephone interviews would be completed.

  Written consent forms were completed and returned to the researcher. Interviews were recorded, and transcribed verbatim by the researcher. Each interview lasted between 35-50minutes.
- Phase 2: Development of Group 2

  Feedback was analysed using thematic analysis (see analysis section). The researcher attended a NS team meeting to feedback the findings. In consultation with the team, the format and content for Group 2 was devised (described in detail in the results section).
- Phase 3: Group 2 feedback

  Following the running of Group 2, invitation letters (Appendix D), information sheets (Appendix F) and consent forms (Appendix G) were sent to families who attended. The same procedure for conducting telephone interviews was followed as in Group 1.
- Phase 4. Consultation/ feedback from facilitator

  Feedback was shared with the team facilitator via email and follow-up telephone call. A telephone interview was conducted with a team member who facilitated both Group 1 and Group 2 to elicit comparative feedback. This interview was recorded and transcribed verbatim.

Analysis

Thematic analysis was used to identify themes within the data. Group 1, Group 2 and facilitator interviews were analysed separately. The phases of data analysis described by Braun and Clarke (2006) were adhered to. Data was coded and collated into themes by the first author. Themes were reviewed and refined and internal homogeneity and external heterogeneity checked. If codes did not fit coherently within themes, themes were reviewed and re-developed. Extracts that did not relate

to the topics in question were excluded. Themes were then reviewed in relation to the entire data set to ensure that they reflected the data set as a whole.

Data from Group 1 and Group 2 was also analysed and collated into themes independently by a second reviewer (trainee clinical psychologist). Similar themes were identified, with inter-rater agreement of 75% achieved.

Results

For clarity, the results will be presented according to phases 1-4 described above. Quotes will be used to illustrate the sub-themes identified, with P1-P10 (followed by transcript page number) used as confidential participant identifiers for quotes (Full table of quotes according to themes available on request). Thematic maps are available in Appendix L.

Phase 1-Feedback from Group 1

Six qualitative telephone interviews were conducted with participants who attended Group 1 (P1-P6).

Four broad themes were identified as presented in Table 6 below.

Table 6. Group 1 Thematic Table

Theme	Subtheme
Positive aspects/benefits of group attendance	Receiving relevant information
	Delivery of information and opportunity for questions
	Meeting other families and having space to share
	Meeting/developing relationship with the team
	Time/Location
Challenges	Accommodating different needs
	Practical considerations
	Who to invite
	Managing confidentiality and boundaries
	Preference for individual information/ support
Impact of caring	Negative aspects of caring
	Positive aspects of recovery
Recommendations for improvement	Content (Further information required)

	Timing of when sessions offered Simplifying/ reducing amount of information Offering discussion group to families (either as part of the group or separately)

Theme one: Benefits/ Positive aspects of attendance

Receiving relevant information. This subtheme relates to the perceived benefits of receiving information on psychosis mentioned by all participants. For example, P2 stated "You know you get so desperate that you push yourself to find out more, I think that's how people were who came, wanted to know more" (p.5). The information was perceived as useful in facilitating their understanding of FEP and how to support their family member.

All six participants agreed that the included topics were relevant, with particular participants choosing to only attend sessions perceived as relevant to them (e.g. P3 only attended session on relapse prevention as this was relevant to his family's circumstances).

All participants agreed that they found it helpful to have a person with personal experience (PPE) speak at the group, and were keen that recovery stories feature in upcoming groups. Two participants felt that listening to recovery stories personalised the group.

> It was reassuring, we're all parents talking about our children and the problems we're having and we don't go personally too deep because its not a good idea but its all a bit cerebral and separated from the reality of it, caring for them and then suddenly this lad comes along whose been through it and we all sort of recognize that boy, parts of what our own kids have gone through or are going through and it was just lovely to see him present so well and I don't know the whole thing was just very touching and moving. (P4, p.12)

Delivery of information. This subtheme relates to positive perceptions of how the information was delivered. The overall lecture style was acceptable to participants interviewed. For example, P2 said "I think the slides were helpful [] I think that was good and I certainly picked up lots of bits of information" (p.1).

One participant reflected on the importance of repetition of the information (due to the complexity of some of the concepts). P2 indicated “I had heard about that (stress-vulnerability model) through (care coordinator) but you kind of need to hear these messages a lot in different ways” (p.2).

Having the forum to feel comfortable to ask questions was also identified as a positive aspect of attendance mentioned by all participants.

> And the best people to ask is you guys [] I would rather come to one of you guys to ask particular questions than going on the internet or whatever because all of that is very general. (P1, p.7).

One participant also identified that learning information in a group setting was more personal and acceptable to them. P2 reflected on the importance of gaining knowledge that “didn’t come from a website, that doesn’t come from pieces of paper, that comes from people” (p.13)

Four participants emphasised that that it was important that the group was informal, and that families felt comfortable in a relaxed and friendly atmosphere where "people could talk" (P4, p.3).

With that in mind, participants also suggested that it was important that family members could remain anonymous if they wished. For example, P4 acknowledged that "It was up to us, there was never any pressure, there was never any pressure, never anyone saying oh you stand up and you tell us your story" (P4, p.13)

Meeting other families and having a place to share. This sub-theme relates to participants comments about having the opportunity to meet and share the experience with other families. This was mentioned by each of the participants.

> People were all in the same boat with their different loved ones and that who were suffering and eh you know and you feel like you’ve got a bit of a bond, something in common with everybody, because they’ve got something similar going on in their lives haven’t they. (P6, p.13).

Having the space to share and listen to the experiences of other families promoted normalisation (see below).

> I think you get a lot of value listening to other people talk and their experiences. It helps to get a range and picture, anything to help normalize or make it not just you is good because it's actually really difficult for people who haven't had any experience of it to understand. (P2, p.9).

Team aspects. Participants also acknowledged the benefits of developing a relationship with the team, having access to different professionals and time to speak individually with team members. For example, P1 indicated that "That was very good the way you did it because you gave us the opportunity to ..em speak to the people in your team" (p.13). The team were regarded as acting as a "safety net" for families in the longer-term, and families appreciated the accessibility of the team. Following the group, all families agreed that they would feel able to contact the team in the future (e.g. in the event of a crisis), indeed this is something that many families considered to be an incredibly important aspect of the service. P3 reflected that "Mostly its knowing that the support is there and emm it was going fine but it's like a safety net" (p.3). The group was viewed positively in facilitating this engagement, and attendance appeared to result in increased confidence and recognition of what the team does.

Theme two: Challenges

A number of challenges and considerations for teams running these types of information sessions were also identified.

Accommodating different needs. Five of the six participants interviewed reflected on the challenges of providing information that is relevant to such a diverse group of families and circumstances. It as also noted that individuals have preferences for different levels of interaction and style of group, which can make the development of a standard programme challenging. This is illustrated by P2 who said "you've got this group of people and we're all going to be wanting something slightly different" (p.7).

As highlighted below, it was also recognised that different information is required at different stages of a families' involvement with the service.

> There are one or two things which are sort of like tell-tale signs of relapse, slipping into psychosis again which isn't relevant at that point, I appreciate

that and maybe and that's where that was much more relevant for me when I came along. (P4, p.16).

Practical considerations. Similar to Riley et al. (2011), four participants spoke about the time commitment involved in attending the information sessions in the evenings, and the range of responsibilities which can make regular attendance at the information sessions difficult. For example, P2 felt that "it was quite an early start and sometimes people's work situations, work and travel are probably the things that make it difficult" (P2, p.12).

Who to invite? There were mixed views on whether service users should attend the group. Three participants indicated that it was useful to attend the group separately from service users as it allowed family members to ask questions openly.

> Especially at the beginning if the child was there as well it might inhibit you from asking questions as deep as you might do if you see what I mean, it might be, you might not want to hurt the person's feelings. (P3, p.5).

Three of the participants suggested that it would have been useful to have the shared experience of attending with their sons/daughters.

Managing confidentiality/ boundaries. The sub-theme 'managing confidentiality/boundaries' relates to boundaries/confidentiality being managed by the group facilitators (i.e. allowing family members to express themselves, but also staying on topic and ensuring information was delivered). This was emphasised by two participants who felt that this was managed appropriately.

> I think what was very good in the information sessions was the way in which people's opinions were heard but moved on at the appropriate times so I was really impressed by that because it's a really difficult one. (P2, p.10).

The challenges associated with this aspect of the group were also emphasised and raised as an important consideration for teams running such groups, highlighting the importance of clarifying ground rules/confidentiality agreements.

> What was a bit odd was that and I could see why it had to be done, was that (team) had to intervene sometimes and say hang on a minute this is getting a bit personal… I could see exactly why he would be saying that em… but you know these were people who just wanted to come and maybe talk and it was very difficult. (P4, p.14).

Preference for individual information/ support. It was also suggested (by three participants) that attending a group many present some challenges for people who find groups anxiety-provoking and as such, delivering information on psychosis in this format may not represent a viable option for some families.

> I think maybe going into a group with people you don't know very well might be a bit intimidating, particularly when it's something that is a very emotional and difficult situation (P2, p.12).

Although not necessarily mentioned as a barrier to attendance to the group, P1 also acknowledged that there "are stigmas attached to that kind of thing and we're all aware of it" (p.1).

Theme three: Impact of caring

All six participants spoke about how distressing and uncertain caring for someone following FEP is. For example, P6 said **"**You know its been up and down for him, sometimes he's well, sometimes he's not so well, you think he's getting better and then he goes back**"** (p.5)

Negative aspects of caring for family member experiencing psychosis. Similar to the findings of Riley et al. (2011), many of the participants reported feeling ill-equipped, scared and alone. These feelings were reported to be particularly pertinent when their family member first experienced psychosis, with P1 reporting that they felt "pretty much on [their] own" (p.2).

> It is such a big vast area which at the beginning you don't know anything about at all, you're thrown in right at the deep end. (P3, p.6).

Positive aspects of caring. Although less prominent than the subtheme above, four participants also spoke briefly about the positive relationships, closeness, learning achieved and experiences of recovery they shared with their sons/daughters. For example, P3 spoke about the recovery process and hope for the future as his son has "been doing really well since he had his episode hmm he was medication for a while, he's now completely off it" (p.1).

Phase 2: Development of Group 2

This section will incorporate the fourth theme identified within Group 1 feedback 'Recommendations for improvement', along with analysis of how ideas generated by Group 1 feedback were incorporated to change both the format and content of the group. For transparency, the number of participants who endorsed each recommendation is displayed below.

Theme four: Recommendations for Improvement

The elicited recommendations are displayed in the table below.

Table 7. Recommendations for improvement elicited in feedback from Group 1

- Improving clarity and presentation of information to make more family-friendly sessions (removing jargon/acronyms/ research references/ reducing amount of information delivered) (Two participants)
- Adding an extra session was suggested as a way of reducing the amount of information delivered in each session (One participant)
- Further information on caring role, stress management and support for carers. Although included in Group 1 session content, this was unfortunately cut short due to session over-running (One participant).
- Further information for siblings (or separate group) (One participant)
- Keeping to time (One participant)
- Further pre-course information to ease anxiety (phoning families/offering leaflet on format of group/ reminding families that speaking/contributing to the group is up to each individual and that they do not have to speak if they do not wish to) (Two participants)

- Offering separate discussion time for families to share personal experiences (either before/after information sessions or as a separate group) (Four participants agreed that this would be helpful). This was suggested as a way of offering further support to families, while allowing the information sessions to focus on providing information and asking questions.
- Offering opportunity for families to attend earlier in their involvement with the service (Five participants). Families attending were at different stages of their involvement with the service. Although there was different opinions on when would be best, it was identified that this would need to be carefully considered as it was felt that attending too early in involvement may be overwhelming for families, but that this type of group would represent a good service to be offered within the first few months-first year when families felt particularly ill-equipped and isolated.

Findings from Phase 1 were presented at a team meeting. In light of the feedback and in consultation with the team, the following changes were agreed.

Table 8. Implemented changes leading to development of Group 2

- Amount of information reduced and clarified (removal of jargon/ abbreviations).
- Consideration of timing. It was decided that the majority of families within the service would be invited to the family information sessions (following discussion with their care coordinator), with the exception of a number of families waiting for assessment. As the group becomes a more established rolling programme, it is anticipated that there will be more opportunity for families to become involved at different stages in their journey.
- Change of venue. There were some difficulties with the acoustics in the first venue, therefore the venue changed to a smaller room within the resource centre to improve this and to fit with the informal nature of the group, which was identified as a benefit in the Group 1 feedback.
- Addition of information on siblings and carers (including speaker from primary care service which offers additional support to families), and further pre-course information on what to expect from the course.

- Adding a fifth session resulting in increased time for presentations on the carer's role, discussion, and questions.
- Distributing responsibility for the group presentations more evenly amongst all team members, with the hope that this would make the group more viable as a rolling program and to help encourage ownership of the group amongst the team as a whole.

The following session structure (Table 9) was developed, including an additional session devoted to information on support for siblings and carers. The team also invited an external agency to provide information on sources of support for families.

Table 9. Family information group: Course content for Group 2

Week	Content
1	Introduction to the team
	Outline of EI service
	What is psychosis?
	Stress Vulnerability Model
2	Medication and Physical Health
	Substance Misuse and Psychosis
	Formulation
3	Cognitive Behavioural Therapy
	Family work
4	Early Warning Signs & Relapse Prevention
	Recovery Focused Activities
	Getting back into Employment, Education and Training
5	What it means to be a carer and local support available
	Support for Siblings

Phase 3- Feedback from Group 2

Following the implementation of revisions and the running of Group 2, feedback was collected from three participants (P7, P8, P9). Two participants completed telephone interviews. A further participant (P9) wished to contribute by returning

written feedback. Identified themes, as well as a number of similarities and differences emerging from the Group 2 feedback will be discussed.

Theme 1: Benefits/ Positive aspects of attendance

Many of the benefits/ positive aspects of attending these types of sessions (Table 10) were reiterated by those attending Group 2, thereby increasing the validity of results.

Table 10. Positive aspects of attendance

- Opportunity to meet the team and develop this relationship (knowing who to contact if required)
- Putting a 'face' to a friendly team
- Consistency of messages
- Developing a better understanding of psychosis and increasing confidence
- Having hand-outs and literature available
- Right amount of information
- Positive and hopeful
- Acknowledging and validating role of carers
- Meeting and learning from other families
- No pressure to speak
- Opportunity to ask questions
- Having space to ask questions separate from service users (both telephone interviews)

A number of further positives were also acknowledged in light of the recent changes including one participant reflecting positively on the delivery of information and format of sessions (see below).

> I felt that there was just the right amount em each session and sort of 5 sessions altogether was a good number of sessions, there was still plenty of time to ask questions and to have all the information within the hour and a half time slot so for me it was quite relaxed, I thought that was quite good and not too heavy. (P7, p.3).

Session five, which focused on the caring role and support, was noted as being particularly helpful by one participant, highlighting the value that role recognition and validation can have for families attending.

> One of the really powerful things was in the last session acknowledging em how tiring and how important it is your role as a carer, [] that was nice and I remember coming away from that session feeling like oh you know we're doing a lot right and we're trying our hardest and you know we are doing an important thing [], it was nice to hear it being acknowledged. (P7, p.10).

Theme 2: Challenges

Similar challenges of running a group were identified in the Group 2 feedback. These included groups not suiting some individuals, with one participant reflecting that some families might be dissuaded from attending because they're "quite private" (P8, p.10). Difficulties maintaining a balance between encouraging discussion and questions, and delivering general information relevant to all families was also acknowledged. All three participants in Group 2 felt that it was important that families have a space separate from service users to receive information and ask questions in order to receive their own support. Similar to the Group 1 feedback, participants in Group 2 expressed fears that having service users also attend may make the group 'too personal'.

> (Service user) did ask if he could go and we did say well it might not be appropriate to be honest it might upset you [] I was worried about em it becoming too much of an emotional issue. (P8, p.16).

Theme 3: Recommendations

A number of further recommendations were elicited from the Group 2 feedback. These are displayed below.

Table 11. Recommendations elicited from Group (including participants who endorsed each recommendation)

- Offering flexibility in relation to date/ time of group (P8)
- Forum devoted to allowing families to share their personal experiences (P7, P8, P9)
- Delaying start time by 15mins (P7, P8)
- Advertising group more widely (P7)
- Keeping content of group quite general to enhance relevance for all families (P8)
- Offering group to families at earlier stage of involvement with services (P7, P8)
- Further time to speak individually with staff (P7)

Phase 4: Feedback from facilitator

This section will describe feedback from the facilitator on the implemented changes following the completion of both groups, responses to recommendations elicited from Group 2 feedback, and overall reflections from the team.

In relation to the changes implemented in the development of Group 2, the facilitator indicated that the feedback collected from Group 1 contributed to an overall improvement in the subsequent running of the group as it "felt a lot more positive, it just felt like the group was received better" (P8 p.5).

One of the factors identified as contributing to this improvement was the change in the delivery of information to make it more concise and accessible for families (see below).

> We really have tried to make the information concise and really simple and take out all the research and things like that, you know people really wanted to know how to use the information and how it was relevant for them (p.1)

As identified in feedback collected, the importance of making families feel comfortable was emphasised within the delivery of the Group 2.

> This time it worked better because it's more personal, it's less formal em and we sat in a semi-circle, we sat in with the family members so it wasn't like we were sitting at the front like a presentation so it was more like a discussion, we did have the slides to follow just so there was some structure. (p.6).

In relation to recommendations that were endorsed in both phase 1 and 3, offering an additional forum for parents to discuss concerns and experiences was identified as a possible avenue for service improvement. Following the identification of this need, the team responded by offering a follow-up support session to carers to discuss ideas for further support. In collaboration with carers who attended this session, the possibility of a drop-in service/carers coffee morning was identified as a possible means of addressing this need.

> As the group has moved on I have noticed how increasingly the parents attending have been eager to tell their stories, I think it might be a good idea to give them some platform to do so, with that being the agenda. (P9, feedback form).

There were also a number of recommendations identified in the Group 2 feedback that, in consultation with the team, were not considered possible to implement. These included offering a variety of times for the group and advertising more widely. These ideas were constrained by the lack of resources and confidentiality issues. In addition, these groups are designed to be specific to EI services.

Overall, the team were pleased that the feedback supported the continued use of the MFPG sessions by meeting the needs of at least a proportion of families attending the EIP service. The team were enthusiastic about implementing the changes, and considered it important to continue with the evaluation and on-going improvement of the group by providing feedback forms at each session.

Discussion

The first aim of this project was to investigate whether the MFPG's developed met the needs of families attending the NS service. An analysis of feedback suggests that family information sessions, as recommended by IRIS (2012), represent a viable

support option within the NS service as they have been shown, from verbal reports, to meet the needs of at least a proportion of families involved in the service. The perceived benefits identified are consistent with other multi-family group evaluation studies (Petrakalis et al. 2013; Riley et al., 2011). For example, in line with the literature, enhancing families understanding through offering an additional forum for learning about psychosis, asking questions (Gleeson et al, 1999; Mullen et al., 2002; Petrakalis et al., 2013), and normalising experience through meeting other families, hearing personal stories of recovery from a person with personal experience and having the opportunity to share (Glentworth & Reed, 2011; Mullen et al., 2002; Riley et al., 2011) were perceived as positive aspects and benefits of attending such groups.

The second aim of the project was to identify barriers to attendance and avenues for development. A number of barriers to attendance were identified including apprehension regarding the group format, and the time commitment involved. An additional number of important challenges and considerations, similar to those identified in the existing literature (Glentworth & Reed, 2010), were also found. For example, it was found that teams need to be flexible to the changing information needs of families attending such groups (Burbach. 2012; McFarlane, Dixon, Lukens, & Lucksted, 2003), and that maintaining a balance between encouraging expression amongst families while also providing information on the core topics can be challenging (Glentworth & Reed, 2010). As found by Riley et al., (2011), the optimal timing of attending the group was individual to carers, with some reporting that earlier on in involvement would be helpful as it represented a particularly distressing time, while it was also noted that attending a group too early could be overwhelming.

A number of changes to the format and content of the sessions were made in developing Group 2. This affected the teams practice in a number of different ways, through changes to the structure of the group (addition of fifth session, further information for siblings/ caring role), making the information more family-friendly (by simplifying information, removing jargon, reducing amount/depth of information), changing venue to improve the acoustics and to enhance the informal nature of the group (smaller venue), as well as consideration of how to provide families with space to share their personal experiences (as acknowledged by Glentworth & Reed, 2010). Overall, the implemented changes were perceived

positively by the team. Considerations and implication for health care practice are summarised below.

Table 12. Implications for Health Care Practice

- This study provides additional support for the inclusion of multi-family information groups as a valued support option for meeting certain families needs. Due to the identified barriers and challenges, as described by Burbach (2012), such groups should continue to represent only one of a range of supports available to families.
- Benefits of attendance for families are wide-ranging and include; providing the opportunity to develop a better understanding of psychosis, promoting normalisation and reducing isolation by providing the opportunity to meet other families, and the opportunity to meet and develop relationships with the team.
- Information delivered should be adapted for families (removing jargon/ acronyms/ references), and incorporate time for discussion/questions and time to speak individually to team members.
- The timing of when the group is attended by families should be carefully considered. Early on in involvement with services is considered to be a particularly isolated time.
- Topics included were considered relevant. Families require different information at different stages of their journey.
- There were mixed views on whether service users should also attend the group. This is also evident within the literature with the advantages e.g. facilitating mutual understanding (Mullen et al., 2002) and disadvantages e.g. dissuading families to ask questions (Riley et al., 2010) identified.
- Families have positive views about having a person with personal experience speak during the information sessions.
- If resources permit, additional forms of support which promote discussion/ support amongst carers should be offered (coffee morning/drop-in sessions)
- Careful consideration should be made to manage boundaries within groups, including establishing ground rules around confidentiality (e.g. allowing

participants to express themselves, while also providing sufficient time to deliver the information e.g. as noted by Glentworth & Reed, 2010).

- The importance of continual evaluation of on-going groups is paramount, including offering a variety of means for feedback (verbal/ written).

Strengths and limitations

The strength of this research is that it provides rich feedback on participants' experiences of MFPG's, including additional follow-up data on the implemented changes. This design fits with the recommended 'act-evaluate-reflect-learn-act' cycle (DCP, 2010) for service improvement. The reliability of reported data and themes was enhanced by the inclusion of a second reviewer. The positive aspects of attendance identified in following both groups are largely consistent, improving the reliability of conclusions drawn.

The limitations of the findings must also be acknowledged. As the researcher was involved in facilitating Group 1, participants' willingness to be open and honest about the negative aspects of the group may have been affected. Furthermore, not all the views of those who attended are included, therefore these recommendations should be viewed cautiously. Low uptake is one of the main challenges presented in gathering reliable and inclusive feedback on groups (Barrowclough et al., 1999). It was acknowledged that providing feedback at an evening group may be constrained by limited time and tiredness, and services may need to consider a variety of ways of gathering feedback. On-going evaluation of upcoming groups remains essential to identify and encourage on-going improvements. This may be best achieved by providing a variety of ways for attendees to provide feedback (by distributing forms and SAE's at the groups/ telephone follow-up) and integrating time-slots within the group dedicated to completing feedback.

This study indicates that, in line with recommendations (DCP, 2010), carer feedback can be successfully incorporated to develop and improve a rolling programme of family information sessions within a local EIP service. This also demonstrates a move towards greater inclusion of carers within the design of the service, as recommended by the Triangle of Care (Worthington & Rooney, 2010).

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University of Bath

Doctorate in Clinical Psychology

Main Research Project

Mental imagery and idiosyncratic goal achievement in depression: A three-group comparison

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This journal takes an experimental approach to understanding psychological disorders and their treatment, using cognitive, behavioural and neural models. Submissions that examine novel psychological, theory-driven techniques are encouraged within the guidelines for authors and as such the current research fits well within the required remit.

Abstract

Mental Imagery (MI) and implementation intentions (II; creating concrete plans for when, where and how a goal is to be achieved) have shown promise in enhancing performance and goal achievement. As depressed mood is often characterized by loss of interest and reduced engagement in previously rewarding activities, the aim of this study was to investigate whether MI and II strategies could be used to enhance rates of goal achievement in participants presenting to services with low mood/depression. An experimental three-group comparison was used, with random allocation to the levels of the independent variable (MI, II, Control). Each participant (N=44) devised three idiosyncratic goals, with the researcher guiding the participants in the MI/II groups through the relevant cognitive strategy in relation to their first goal. Those in the MI group reported a significant increase in the perceived likelihood of achieving their goals post-strategy. There were no significant differences in the achievement of goals amongst the three groups, although higher rates of goal achievement were apparent in the MI group. The current study suggests that generating specific goals and using MI may represent a valuable technique for improving individuals' beliefs that their goals are attainable and within their reach. Further research with larger samples is recommended to explore the impact of techniques on actual goal attainment.

Keywords: Mental Imagery, depression, goals, implementation intentions, goal achievement

Mental imagery and idiosyncratic goal achievement in depression: A three-group comparison

Research into mental imagery (MI) has increased in recent years, with a growing emphasis on how it can be used to enhance an individual's performance and motivation (Chan & Cameron, 2012; Pham & Taylor, 1999; Vasquez & Buehler, 2007). MI refers to the multi-sensory representation of hypothetical or previously experienced events, in the absence of external input (Chan & Cameron, 2012; Sanna, 2000), often described as 'seeing with the minds eye or hearing with the minds ear' (Kosslyn, Ganis, & Thompson, 2001, p.635). In a meta-analysis, MI or cognitive rehearsal has been shown to have a positive and enhancing effect on performance, with a small to moderate effect size (Driskell, Copper, & Moran, 1994). In particular, encouraging individuals to create multi-sensory images of themselves engaging in their target behaviour has been widely demonstrated to enhance performance in athletes and musicians (Gregg & Clark; 2007; Smith, Wright, Allsopp, & Westhead, 2007), promote health behaviour change (e.g. increasing fruit consumption amongst low consumers; Knäuper et al., 2011), increase levels of physical activity (e.g. promoting physical activity in inactive adults; Chan & Cameron, 2012), encourage higher rates of behavioural task achievement (e.g. increase likelihood of voting in an election; Libby, Shaeffer, Eibach, & Slemmer, 2007), and increase an individual's expectations that an event will occur (Carroll, 1978).

MI has been shown to activate similar neuropsychological brain pathways to those produced during actual performance (Kosslyn et al., 2001) and is described as an 'emotional amplifier' resulting in greater levels of emotional response than verbal processing (Holmes, Lang, Moulds, & Steele, 2008). Studies have included different combinations of imagery including process (i.e. imagining the steps involved in achieving a goal; imagining fingers pressing sequence of piano keys) and outcome/approach imagery (i.e. imagining the achievement of one's goal; applause after performing well at recital). It has been suggested that goal setting imagery is most effective when it includes both components (Greitmeyer & Wurz, 2006). However, a number of studies have emphasised the particular importance of process imagery in preparing for goal achievement (Taylor, Pham, Rivkin, & Armor, 1998),

potentially by strengthening the cognitive links between intention and action via the generation of cognitively accessible representations of relevant cues (Escalas & Luce, 2003). For example, those who engaged in generating process imagery of studying for an exam started studying earlier and received higher grades than students who were only encouraged to imagine themselves receiving a high grade (Taylor & Pham, 1999).

The creation of action plans or implementation intentions (II) have also been shown to promote successful goal achievement across a wide variety of contexts (see Gollwitzer, 1999; 1993). II refer to the generation of 'if-then' scenarios and specify when and where a goal is to be carried out. II are proposed to influence goal attainment through the enhanced activation and cognitive processing of critical cues and cue-response links (Gollwitzer & Sheeran, 2006). Both process imagery and II are viewed as enhancing concrete action plans (Knäuper et al., 2011). Gollwitzer and Brandstätter (1997) investigated the efficacy of II in participants attending University by asking them to devise difficult and easy goals. Two-thirds of those who used II were successful in completing their difficult goals (e.g. writing an academic paper), whereas only a quarter of those in the control group achieved their goal. Achievement rate for the easy goals was very high across both groups. Similarly for health promotion, II have been effectively used to increase the rate of breast examine checks (Orbeil, Hodgldns, & Sheeran, 1997) and to increase vitamin consumption (Sheeran & Orbell, 1999). In the absence of either II or MI, an individual's intentions alone have been shown to account for only 28% of the variance in behaviour (Sheeran, 2002).

Reduced motivation for and withdrawal from desired goals are implicated in affective disorders (Johnson, Carver, & Fulford, 2010), with reduced interest in activities forming part of the diagnostic criteria for depression (American Psychological Association, 2013). The dysfunction of approach and avoidance motivation systems is proposed to underpin mood disorders (Davidson, Pizzagalli, Nitschke, & Putnam, 2002). The behavioural activation system (BAS) and the behavioural inhibition system (BIS) (Gray, 1990) are considered to drive or inhibit an individual towards action, with depression characterised by low approach (BAS) and high avoidance activity (BIS) (Henriques & Davidson, 2000; Kasch, Rottenberg, Arnow, & Gotlib, 2002). Interestingly, Dickson, Moberly and Kinderman (2011) found that depressed participants did not differ from their non-

depressed (ND) counterparts on their ability to generate valued goals or on their perceived importance but were more pessimistic about the likelihood and controllability of obtaining said goals. Furthermore, individuals with depression have been shown to generate less specific goals than ND controls (Belcher & Kangas, 2014; Dickson & Moberley, 2013), to spend less time engaged in goal-attaining behaviours, to demonstrate less persistence than their ND counterparts, along with difficulties in getting started (Gollwitzer & Sheeran, 2006; Hopko & Mullane, 2008).

Research into goal-focused MI for people with depression is beginning to receive enhanced focus as a means of improving outcomes (Hackmann, Bennett-Levy, & Holmes, 2011; Holmes, Blackwell, Burnett-Heyes, Renner, & Raes, 2016). Although it has been demonstrated that individuals with high dysphoria are less able to vividly imagine positive outcomes (Holmes et al., 2008), the generation of positive imagery has been shown to enhance performance in this group (Pictet, Coughtrey, Mathews, & Holmes, 2011). Pictet and colleagues (2011) studied the impact of generating images in response to different conditions of picture word cues (i.e. positive, negative, neutral) in a sample of 87 participants with dysphoria. Those in the positive imagery condition not only reported an improvement in mood, but also performed better on an unrelated behavioural task. Due to the lack of a comparator cognitive task, it's difficult to determine whether the effect is purely down to the effect of imagery. However, considering MI in the context of approach systems would suggest that MI could potentially represent a way of reducing discrepancy between an individuals current and desired state, through the creation of a mental representation of the imagined action in multiple sensory modalities (Atance & O'Neill, 2005).

Behavioural activation (BA), used as part of the cognitive behavioural model, encourages individuals to engage in valued activities and has been shown to be effective in reducing low mood, as good as or better than cognitive therapy or medication alone (Jacobson, Martell, & Dimidjian, 2001). Although evidence within health, cognitive and sports psychology fields suggest that cognitive techniques (MI/II) may have a beneficial impact on goal achievement (Hackmann et al., 2011), there is currently limited research exploring the optimum way of helping people to re-engage with their personal valued activities. If we can establish and refine the 'active' ingredients of therapy, then this will hopefully lead to improvements in how

therapists approach homework tasks with their clients. This is particularly pertinent considering that those who engage in homework tasks tend to do better in therapy (Neimeyer, Kazantzis, Kassler, Baker, & Fletcher, 2008).

The aims of the current research are to investigate whether participants presenting to services for treatment for primary low mood are able to identify valued goals (Dickson et al., 2011; Dickson & Moberly, 2013). In a partial replication of Dickson et al. (2011), this study will also investigate whether ratings of pessimism, control over goal attainment and perceived importance are consistent with previous research. It is hypothesised that depressed participants will be more pessimistic about goal attainment and report having less control than the ND group reported in the literature. In addition, it is hypothesised that using cognitive strategies (CS; II/MI) to prepare for goal achievement will increase participants ratings of perceived control, likelihood of goal attainment, goal importance and overall motivation post-CS.

This study will also expand on Pictet et al. (2011) study by investigating whether CS (MI/II) are effective in promoting the achievement of a related personally meaningful goal. It is hypothesised that those in the CS group will be more likely to complete their first goal (henceforth referred to as Goal 1) than those in a control group (following completion of MI/II task with researcher) and that participants who are exposed to MI or II strategies will be more likely to go on to complete more of their three devised personal approach SMART (specific, measureable, achievable, realistic and time-limited; Westbrook, Kennerley, & Kirk, 2007) goals when compared to a control group. Within the CS groups, it is predicted that those in the MI group will demonstrate a higher rate of goal achievement than those in the II group.

1. Method

1.1. Participants

The study was approved by REC 7 (15/WA/0109), University of Bath (Reference number 15-127), and local Research and Development departments. Forty-four individuals seeking treatment for low mood were recruited from four primary care NHS services. Of the expressions of interest received, 61% (44) went on to take part in the study (one participant was excluded based on screening). Depressed mood was the primary difficulty for which participants were seeking treatment (identified

by diagnostic screening and PHQ-9 score of at least 5 for mild depression). Participants were either on the waitlist for treatment for depression or had started either individual or group treatment for low mood. Demographic details are displayed in Table 1.

1.2. Design

Experimental between-group design with random allocation to the levels of the independent variable (cognitive strategy; MI, II and control). A longitudinal follow-up was included in which the dependent variable was Goal 1 achievement (Yes/No) or number of goals achieved (0-3).

1.3. Measures

1.3.1. Mini International Neuropsychiatric Interview 6.0 (M.I.N.I; Lecrubier et al., 1997)

The M.I.N.I is a short diagnostic psychiatric interview, based on DSM-IV (Diagnostic Statistical Manual-Version 4) criterion. This measure, when compared with the Composite International Diagnostic Interview (CIDI), has good specificity and sensitivity, and demonstrates good inter-rater and test-retest reliability (Lecrubier et al., 1997).

1.3.2. Patient Health Questionnaire-9 (PHQ-9)

The PHQ-9 is based on DSM-IV criteria for depression and is used within clinical practice as a brief, reliable and valid measure of depression symptomatology (Kroenke, Spitzer, & Williams, 2001). Scores range from 0-27. A score of 5 or greater is indicative of mild depression.

1.3.3. Spontaneous Use of Imagery Scale (SUIS; Reisberg, Pearson, & Kosslyn, 2003)

This 12-item questionnaire measures use of imagery in everyday life on a 5-point scale. It has been shown to have good internal consistency, convergent validity and test-retest reliability (Nelis, Holmes, Griffith, & Raes, 2014). Scores range from 12-60, with higher scores associated with the greater use of imagery in everyday life.

1.3.4. Intrusive Verbal Thought Questionnaire (IVTQ; McCarthy-Jones, Knowles, & Rowse, 2012)

This questionnaire measures intrusive thoughts that are verbal in nature. Reponses are measured on a 5-point scale ranging from 'strongly agree' to 'strongly

disagree'. Total scores range from 10-50, with higher scores representing higher levels of intrusive thoughts. This measure was used to investigate whether there were any between-group differences on propensity towards verbal vs imagery processing and as a distractor following the completion of the SUIS in all groups.

1.3.5. Goals Task (Dickson & Macleod, 2004)

This was used to identify participant's idiosyncratic approach and avoidance goals. Participants responded to the following prompts 'In the next week it will be important for me to try to...'(approach goals) and 'In the next week it will be important for me to try to avoid...'(avoidance goals). Goals were described as 'future experiences that participants would like to achieve (e.g. 'I would like to exercise more') or avoid (e.g. 'Not let little things upset me')'. Participants were encouraged to make these SMART and to pick three goals from across these two categories that they wished to complete over the forthcoming week.

1.3.6. Goal ratings

As described in Dickson et al. (2011)**,** participants rated each of their goals on a seven-point scale. Perceived likelihood of goal attainment, perceived control, goal importance and overall motivation were rated from 1 'not at all' to 7 'extremely' (see Appendix R).

1.3.7. Additional questions for MI group

Participants assigned to the MI group were required to rate the vividness of their images (Hertel, Mathews, Peterson, & Kintner, 2003) on a likert scale from 1'not at all vivid' to 7 'extremely vivid' to assess ability to engage in the task. Participants were also required to rate how much they were imagining the image from their own eyes from 1 'not at all' to 9 'all the time' (Wild, Hackmann, & Clark, 2007). Different perspectives exist on which is the most effective imagery; first person *vs* third person (Holmes, Coughtrey, & Connor, 2008; Vasquez & Buehler, 2007).

1.4. Procedure (See Figure 1 for graph of procedure)

Potential participants were randomly allocated to one of three conditions (online Research Randomiser Programme; Urbaniak & Plous, 2003). Information packs (see Appendix N/O/P) were posted or sent via email.

1.4.1. Interview 1

Interviews were conducted over the phone and were audio-recorded. Consent form, PHQ-9, SUIS, IVTQ, M.I.N.I and the demographic information sheet were completed over the phone (see Appendix P/Q). If screening criteria were met, the following steps were completed.

1.4.2. Goals task-All groups

Goals were defined as future experiences that you would like to achieve (e.g. '*I would like to exercise more*') or avoid (e.g., *'Not let little things upset me'*). These could include household chores like doing the vacuum cleaning, or fixing something, or more pleasurable activities like going for a walk, or going shopping.

Using the Goals Task prompts (Dickson & MacLeod, 2004), participants identified at least three SMART goals for the forthcoming week. If abstract goals were generated, the researcher assisted the participant to make them SMART. Although participants were asked to devise both approach and avoidance goals, to facilitate ease of MI/II generation and consistency across groups, goals were framed as approach-related SMART goals. Ratings for each of the three goals (Likert scale) were completed, namely importance, motivation, control, and likelihood.

1.4.3. MI Group only

Participants were encouraged to generate and describe multi-sensory images of all the steps involved in completing their first goal, in as much detail as possible and using as many senses as possible in the mental imagery of this goal. Prompts adapted from Wild, Hackmann and Clark (2009) were used to facilitate the generation of images. Examples of prompts included: Can you describe the image to me? Do you see yourself in the image? Can you see other people in the image? Can you hear anything? And in the image, what sensations do you have in your body?

Ratings of vividness and imagery perspective were taken at the end of the imagery task.

1.4.4. II Group only

Participants in the II group were facilitated to generate a specific plan for when, where and how they would carry out Goal 1 in the upcoming week in the form of 'IF…THEN' scenarios. An example of a cue and a planned response was provided (e.g. 'IF I finish my lunch, THEN I will put on my trainers and go for a walk').

Goals were identified in the same manner as the CS conditions. Participants were not provided with any further strategies on how to approach their goals

1.4.6. Interview 2

Participants were contacted one week after interview 1 to complete interview 2. Participants were asked how many of their goals they had achieved. As a control, each participant, regardless of group allocation, were asked whether they engaged in MI, II or any other strategies to facilitate their goals (See Appendix R4).

Debrief information sheets (see Appendix S) and £5 vouchers were sent to participants.

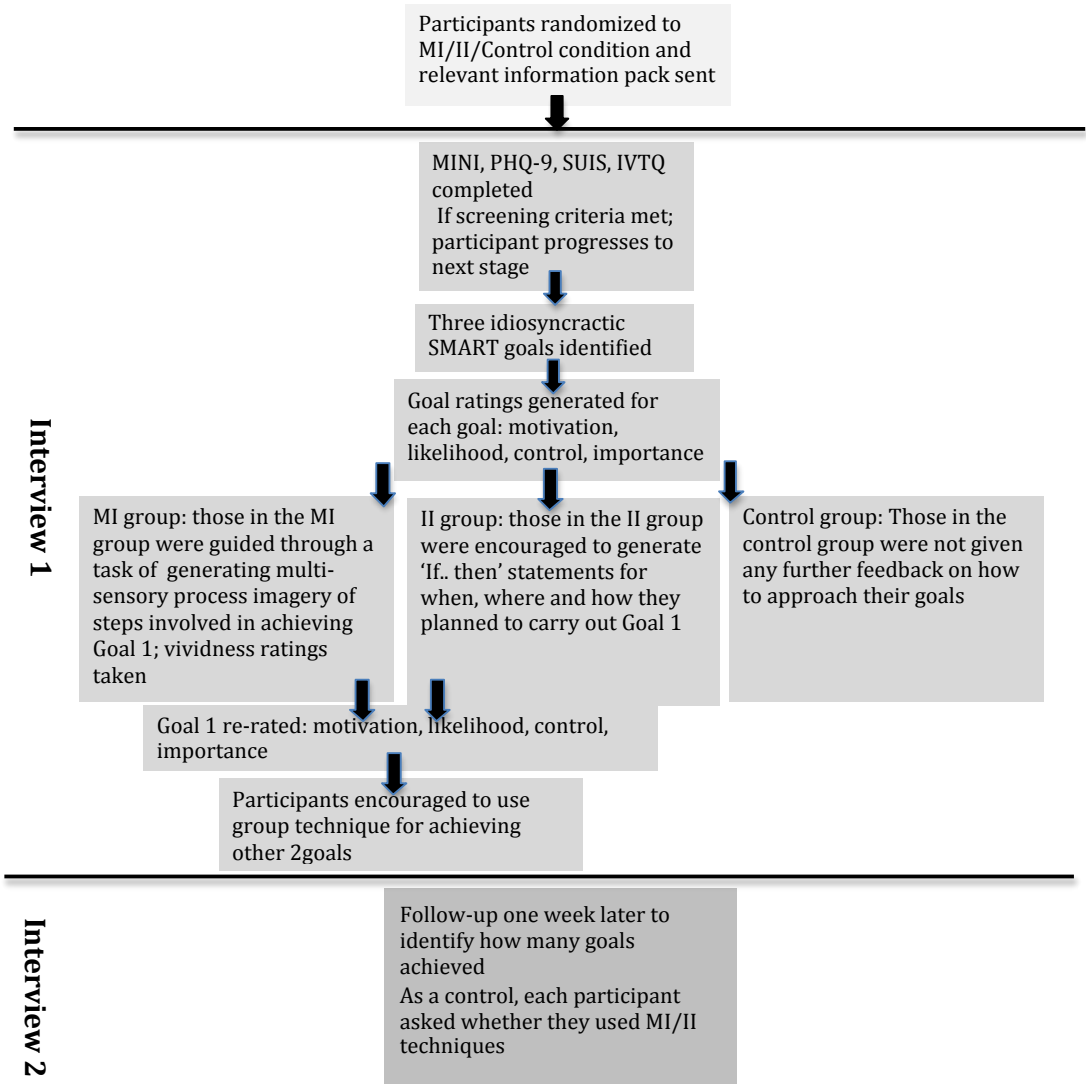

Figure 1. Procedure

Figure 1. Procedure

1.4.7. Reliability

The research supervisor checked a sample of recordings to enhance the reliability of the study and ensure consistency across conditions.

1.5. Statistical analyses

Statistical analyses were performed using IBM SPSS Statistics, version 22, using an alpha level of .05. Statistical tests were chosen based on the nature of the included variables and an analysis of the relevant assumptions (Field, 2011). Analyses were conducted on a combined II and MI group referred to as a 'CS' group initially, followed by analyses of each group separately.

1.5.1. Goal ratings

Due to violations of the assumptions of normality (Shapiro-Wilk < .05), non-parametric tests were used to analyse between-group and within-group differences on goal ratings.

1.5.2. Goal 1 achievement

To examine differences between categorical variables (Group assignment and Goal 1 achievement Yes/No), a Fisher's Exact test was conducted on 2x2 contingency tables. A chi-square test was not considered appropriate due to small sample size (Field, 2013).

1.5.3. Number of goals achieved

Due to violations of the assumptions and the ordinal nature of the outcome variable, non-parametric tests were used to ascertain whether the CS group achieved more overall goals than the control group.

1.5.4. Power

According to post hoc G*Power calculations, analyses conducted on within-group goal ratings (Interview 1), had 76% chance of detecting a large effect (N=30 in CS group; r = .5). For Interview 2 data the power to detect a medium effect (based on Driskell et al., 1994 meta-analysis) ranged from .25-.48 (N= 26-41), significantly below the recommended value of .8.

2. Results

2.1. Interview 1

2.1.1. Randomisation checks

Demographic characteristics according to group condition are displayed in Table 1. An analysis of the boxplots in relation to PHQ-9 scores (see Appendix T) indicated that the median depression score was lowest in the MI group, with the lowest variability of depression scores in the II group. MI and II groups had a similar spread of depression scores. No significant between-group differences were found on PHQ-9 scores $F(2,41) = 1.25$, $p > .05$, SUIS scores, $F(2,41) = 0.86$, $p > .05$, age $F(2,39) = .76$, $p > .05$ or measures of verbal intrusive thoughts, $F(2,38) = .03$, $p > .05$.

There was a greater percentage of females in the II group and males in the MI group, although this between-group difference was non-significant, $X^2(2) = 4.26$, $p > .05$. Similarly, there were no significant between-group differences on treatment status, $X^2(2) = .93$, $p > .05$. There was significant co-morbidity across all three groups highlighting the complexity of conducting research within this client group.

Table 1.

Participant information collected at Interview 1

Characteristic	MI (n= 16)	II (n= 15)	Control (n= 13)	Test statistic (ANOVA)
	M (SD)	M (SD)	M (SD)	
Age (years)	35.80 (9.81)	35.80 (12.75)	40.83 (13.29)	F(2,39)= .76, p =.47
PHQ-9	13.44 (5.39)	15.67 (3.74)	16.08 (5.50)	F(2,41)= 1.25, p =.30
SUIS	39.94 (8.95)	38.53 (10.86)	35.27 (8.99)	F(2,41)= .86, p =.43
IVTQ	36.40 (8.41)	35.93 (8.19)	36.75 (8.37)	F(2,38)= .03, p=.97
	Number (%)	Number (%)	Number (%)	(Chi-square)
Gender N				$X^2(2)= 5.27$, p=.07
Male	10 (62.5)	4 (26.7)	7 (53.8)	

Female	6 (37.5)	11 (73.3)	6 (46.2)	
Ethnicity				$X^2(6)= 4.79$, p=.57
White British	15 (93.8)	12 (80)	12 (92.3)	
Other mixed race	1 (6.3)	1 (6.7)		
European			1 (7.7)	
Any other white background		1 (6.7)		
Chinese		1 (6.7)		
Marital status				$X^2(8)= 4.62$, p=.80
Married	7 (43.8)	4 (26.7)	4 (30.8)	
Single	6 (37.5)	8 (53.3)	7 (53.8)	
In partnership	2 (12.5)	2 (13.3)		
Widowed			1 (7.7)	
Divorced	1 (6.3)	1 (6.7)	1 (7.7)	
Employment status				$X^2(16)= 21.62$, p=.80
Employed(Fulltime)	3 (18.8)	5 (33.3)	4 (30.8)	
Employed(Parttime)	2 (12.5)	4 (26.7)	2 (15.4)	
Self-employed	3 (18.8)			
Unemployed	4 (25)	3 (20)	2 (15.4)	
Student	3 (18.8)	1 (6.7)		
Retired		1 (6.7)	1 (7.7)	
On sick leave	1 (6.3)	1 (6.7)	4 (30.8)	
Highest level education				$X^2(16)= 14.74$, p=.54
Primary	1 (6.3)	1 (6.7)	1 (7.7)	
GCSE	5 (31.3)	1 (6.7)	4 (30.8)	
A level	4 (25)	3 (20)	3 (23.1)	
City and Guilds	1 (6.3)	2 (13.3)	2 (15.4)	
Degree	2 (12.5)	3 (20)	3 (23.1)	

MSc	2 (12.5)			
PhD		4 (26.7)		
Other		1 (6.7)		
Missing				
Treatment status				$X^2(6)= 5.96$, p=.43
Waitlist				
Individual	7 (43.8)	6 (40)	3 (23.1)	
Group		3 (20)	3 (23.1)	
Active				
Individual	4 (25)	4 (26.7)	4 (30.8)	
Group	5 (31.3)	2 (13.3)	3 (23.1)	
Mental health screen				
MINI				
Depressive	16 (100)	15 (100)	12 (92.3)	
Episode	12 (75)	10 (66.7)	10 (76.9)	
Current	14 (87.5)	14 (93.3)	11 (84.6)	
Past				
Manic episode				
Current	1 (6.3)	2 (13.3)	1 (7.7)	
Past				
Panic disorder	2 (12.5)	5 (33.3)	4 (30.8)	
Current	4 (25)	4 (26.7)	4 (30.8)	
Lifetime	7 (43.8)	12 (80)	5 (38.5)	
Agoraphobia	4 (25)	6 (40)	5 (38.5)	
Social phobia	4 (25)	3 (20)	4 (30.8)	
OCD	2 (12.5)	2 (13.3)	4 (30.8)	
PTSD	1 (6.3)	1 (6.7)	1 (7.7)	
Alcohol abuse		2 (13.3)		
Drug abuse				
Psychosis	1 (6.3)			
Current			2 (15.4)	
Lifetime		1 (6.7)		
Anorexia	8 (50)	1 (6.7)	1 (7.7)	

Bulimia	3 (18.8)	9 (60)	4 (30.8)
Generalized anxiety		9 (60)	6 (46.2)
Other medical illness			

2.1.2 Ability to generate valued goals and goal ratings

The majority of participants (98%) were able to generate at least three valued short-term goals. Only one participant (within II group) was unable to devise three goals, and is hence only included in the analysis of Goal 1 achievement. Examples of goals included going to the gym, putting up three picture-hooks, asking a friend to meet up, inviting a friend to the cinema and filling out a job application.

To test differences in baseline goal ratings prior to introduction of a CS, an ANOVA test was used. This indicated that goal ratings did not differ significantly between groups.

Table 2.

Goal ratings by group prior to cognitive rehearsal (averaged across three goals)

Group	*MI (N=16)*	*II (N=15)*	*Control (N=13)*	*Between-group comparisons*	*Combined group (N=44)*
Goal Rating	*M (SD)*	*M(SD)*	*M (SD)*		*M(SD)*
Likelihood	4.8 (1.0)	5.3 (1.2)	5.7 (0.7)	F(2,40) = 2.56, p = .08	5.2 (1.1)
Control	5.7 (1.4)	5.4 (1.8)	6.0 (0.8)	F(2,40) = .73, p = .49	5.7 (1.4)
Importance	5.6 (1.0)	6.2 (0.9)	6.1 (0.8)	F(2,40) = 1.61, p = .21	5.9 (.9)
Motivation	4.9 (1.6)	5.1 (1.6)	5.3 (0.9)	F(2,40) = .19, p = .82	5.1 (1.4)

2.1.3. Does using a CS affect goal ratings?

A Wilcoxon-signed ranks test was used to test differences on goal ratings pre to post cognitive strategy. For those in a CS group (N = 30), perceived likelihood of Goal 1 achievement was significantly higher post-CS (Mdn = 6.5) compared to pre-CS (Mdn = 5.0), z= -2.86, p = .003 (exact, two-tailed), with a large effect size, r = .52. There were no significant differences on any other goal ratings pre to post CS; control, z = -.78, p > .05, importance, z = -.27, p > .05, motivation, z = -1.58, p >

.05. Analysing each group separately indicated that using MI (N=15) significantly increased participants perceived likelihood of achieving Goal 1, z = -2.97, p = .001, r = .77 (Mdn pre-CS = 5.0, Mdn post-CS = 7.0). In contrast, those in the II group (N=15) did not report a significant change in their perceived likelihood of goal achievement following the generation of II (Mdn = 6.0 both pre and post CS), z = -1.13, p > .05.

2.1.4. Vividness ratings (MI group)

Average vividness rating was 5.9 (range 5-7). Average rating of the degree to which participants viewed the image through their own eyes was 6.5 (range 1-9).

2.2. Interview 2

2.2.1. Goal completion across groups

Forty-one participants took part in the follow-up, 15/16 of those assigned to the MI, 13/15 of those in the II group and 13/13 of those in the control group (interview 2). The average number of days between Interview 1 and 2 was similar across the three groups (M_{MI} = 9.60 (Range 7-35), M_{II} = 8.69 (Range =6-27), $M_{Control}$ = 9.54 (Range = 7-23). Overall, there was a high rate of goal completion, with 82.5% (N=34) of participants completing Goal 1 and 72.7% of all goals being achieved at follow-up (See Table 3).

Table 3.

Number of goals completed across groups

	Number of goal 1s generated	Number of goal 1s completed	%	Overall number of goals generated	Overall number of goals completed	%
MI(N=15)	15	14	93	45	35	78
II (N=13/12)	13	11	84	36	26	72
Control(N=13)	13	9	69	39	27	69
Total (N=41)	41	34	83	117	85	73

Note. One participant in the II group only generated one goal and has been excluded from analyses relating to overall numbers of goals achieved

2.2.2. Were those in CS groups more likely to complete Goal 1 than those who did not employ a CS?

A fisher's exact test was used to compare the frequency of goal 1 achievement (Y/N) across groups. There were no significant differences on Goal 1 achievement between the CS and control group ($p = .181$, two-tailed).

Similarly, the MI and control group did not differ significantly on their achievement of Goal 1 ($p = .153$, Fishers Exact Test, two-tailed). Ninety-three percent (14/15) of those in the MI group achieved Goal 1 compared to 69% (9/13) in the control group. The odds of achieving Goal 1 were 6.2 times higher in the MI group than the control group. However, this association was non-significant, $p > .05$, (95% Confidence Interval= .59-64.98). Similarly, the II and control group did not differ significantly on Goal 1 achievement ($p > .05$, Fishers Exact Test, two-tailed), although there was a higher rate of achievement within the former.

2.2.3. Did those exposed to MI/II strategies go on to achieve more goals overall than those in the control group?

To test the difference in the overall number of goals achieved between those who used a CS and those who didn't, a Mann-Whitney test was used. The number of goals achieved by those in the CS group (Mdn = 3) did not differ significantly from those in the control group (Mdn = 2), $p > .05$, $r = .1$. To identify whether there were any differences in the number of goals achieved across the three groups separately, a Kruskal-Wallis test was employed. On examining goal achievement amongst the three groups separately, no further differences emerged, $H(2) = .51$, $p > .05$. In addition, levels of goal achievement did not differ as a function of treatment status or gender ($p > .05$).

3. Discussion

In line with Dickson et al. (2011), participants with depressed mood were able to identify valued goals supporting the assertion that depression is not generally characterised by deficits in ability to generate approach-related goals (Loeb, Beck, & Diggory, 1971; Sherratt & Macleod, 2013). In addition, goals were perceived as being as important as ND controls within the literature (Dickson et al., 2011). Although caution is warranted when drawing comparisons between studies due to design differences and the lack of a ND control group in the current study, perceived likelihood of goal achievement in the current sample was slightly higher than the depressed group reported in Dickson et al. (2011) and not significantly different from ND controls in the sample (Dickson et al., 2011). In addition, the current

sample reported having more control than the depressed sample within Dickson et al. (2011). As goal ratings were based on the three goals participants considered to be realistically achievable within the timeframe of a week, it is likely that the ratings are inflated compared to previous research as additional longer-term goals are not captured (e.g. wanting to be happier, change careers). In addition, previous research has also identified that individuals with depression devise less specific goals than ND controls (Belcher & Kangas, 2013; Dickson & Moberley, 2013). As general or abstract goals are considered to be more difficult to pursue (Carver & Schreiber, 1990), it may be that encouraging participants to make their goals SMART, hence increasing the specificity of goals, resulted in more optimistic attitudes towards goal achievement. Therefore, the process of creating SMART goals, rather than exposure to MI/II techniques, may account for the findings. This supports the idea that SMART goals can help to reduce pessimism when devising goals/homework tasks with clients during therapy.

Interestingly, employing a CS to prepare for goals significantly increased participants perceived likelihood of achieving their goals. Although not replicated in the current study, this is particularly important considering that people with depression have previously been shown to report more pessimistic attitudes towards obtaining their goals (Dickson et al. 2011). When the effects of each CS were examined separately, it was MI rather than devising II that had an impact on likelihood ratings suggesting that mentally imagining the steps involved in achieving a goal is more effective in increasing perceived attainability than developing a concrete plan. The increase in perceived likelihood of goal attainment following MI supports previous work involving ND samples (e.g. Carroll, 1978). Contrary to expectations, there were no significant differences in goal ratings post-MI strategy for ratings of goal importance, controllability or motivation. This suggests that the effects of process imagery may be specific to beliefs about goal attainment rather than more general goal beliefs. As suggested in the literature, this is likely to occur as a result of strengthening the cognitive links between intention and action via the generation of cognitively accessible representations of relevant cues (Escalas & Luce, 2003).

Although the pattern of data indicated a higher rate of Goal 1 achievement amongst those in the MI (93%) and II (83%) groups compared to the control group (69%), as has been found in research involving ND participants (Chan & Cameron,

2012; Greitmeyer & Wurz, 2006; Taylor & Pham, 1999), no significant between-group differences on the achievement rate of Goal 1 were found. Contrary to hypothesis, there were no significant between-group differences on the number of overall goals achieved between CS groups.

There are a number of possible reasons why the level of statistically significant expected differences for Goal 1 completion and subsequent goals might not have been reflected in the current study.

Overall the sample size was small and the study underpowered to detect a small to medium difference as would be expected from the Driskell et al. (1994) meta-analysis. Small numbers in each group raise concerns about the ability to detect statistical differences from the data. This also reflects the difficulties of recruiting large samples of participants with low mood/depression.

The relatively high levels of goal achievement across all groups may reflect the success of devising SMART goals with planned follow-up rather than a reflection on the strategies used. Anecdotally many of the participants identified devising SMART goals and receiving a follow-up call as motivating factors. This fits with a body of evidence suggesting that enhanced accountability through providing a weekly update is associated with greater levels of goal achievement (Matthews, 2014).

As was found by Gollwitzer and Brandstätter (1997), additional cognitive strategies may only be helpful when goals are perceived as difficult but may not have any impact on easy goals. Consistent with this, it is possible that MI/II strategies may have had less of an impact as overall participants developed goals that were rated with high levels of control, importance and motivation.

3.1. Additional limitations

Although participants were encouraged to use MI or II techniques for goals two and three, it was not possible to control for whether this was completed adequately or not. Therefore, the completion or non-completion of goals 2 and 3 does not necessarily adequately test the effectives of MI/II.

Researcher effects are also likely to have impacted on reports of goal completion/non-completion. Given that the researcher contacted participants by phone for the follow-up, it is possible that participants over-reported the number of goals achieved. In addition, the study was at risk of experimenter bias when determining goal attainment ratings if goals were partially completed (for

example, when determining whether idiosyncratic goal was considered achieved if 2miles were run by the participant instead of the planned 4miles).

There are also many additional confounding variables that may have impacted on the achievement or non-achievement of goals. For example, the variety of co-morbid presentations within the current sample; for example, the additional barriers of social anxiety impeding on ability to engage in social-related goals. Furthermore, although potential external barriers were considered when devising goals (e.g. particular friends not being available), the current research only represents a snap-shot (one-week) in time that was not impervious to unexpected challenges (e.g. illness, family emergency). It is also important to note that reduced credibility of the control group (i.e. lack of information provided on a researched technique to be used in the condition) may have contributed to between-group differences (Mooney, Gibbons, Gallop, Mack, & Crits-Christoph, 2014).

Those in the II group were not asked whether or not they had created visual images when devising their II. Engaging in imagery while in the II group may have resulted in reduced independence between the two groups. This is pertinent considering the comparisons that have been drawn between II and MI (Knäuper et al., 2011). Equally, given the association between depression and difficulties in positive imagery formation, it is also possible that those in the MI group experienced difficulties in vividly imagining their goals (Holmes et al, 2008). Although this was not necessarily reflected in the SUIS scores or vividness scores, this is difficult to interpret in the absence of a ND control group.

3.2. Clinical Implications

Within the realm of clinical practice, the current study suggests that supporting clients to generate SMART goals and using MI may represent a valuable technique for enhancing clients' beliefs that their goals are attainable and within their reach.

Due to the lack of statistical power in the follow-up part of the study, it is difficult to draw strong conclusions about whether MI or II represent viable techniques for clinicians to use as a means of enhancing homework task achievement and re-engagement with valued goals within clinical practice, although it is worth noting that the higher levels of goal achievement within the CS groups is promising. Continuing to develop an understanding of this is important considering the improvements associated with homework engagement (Neimeyer et al., 2008).

In relation to the theoretical implications of the findings, the relatively high rates of goal achievement across all categories may suggest that enhancing specificity through devising SMART goals may lead to enhanced activation of the BAS system. This is particularly pertinent considering that individuals with depression have been shown to spend less time engaged in goal-attaining behaviours and demonstrate less persistence than their ND counterparts (Gollwitzer & Sheeran, 2006; Hopko & Mullane, 2008). From the observed increase in perceived likelihood of goal attainment, MI may represent a way of reducing discrepancy between an individuals current and desired state (Atance & O'Neill, 2001), although this was not found to translate into significant between-group differences on follow-up goal achievement.

3.3. Future directions

The results elicited from this experimental design would benefit from replication in a larger scale study to address the limitations of a small sample size. Furthermore, to increase the control across groups, guiding participants through MI script for each of their goals may be beneficial. It is also possible that having only three goals did not provide the opportunity for differences to emerge, a longer study involving more than three goals, categorising these as easy or difficult and including avoidance goals may be helpful to further explore the effects of MI/II. In terms of feasibility, conducting this study on a wider scale within clinical services would be recommended e.g. allocating different low mood groups to different conditions and having the researcher run through techniques with groups randomised to different strategies. Alternatively, different staff could be trained to practice techniques with clients and the outcomes on homework compliance and depression symptomatology post-intervention assessed. As it was difficult to draw comparisons with Dickson et al. (2001) due to the lack of a ND control group, future research would benefit from the inclusion of such a group.

This study provides some interesting insight into the role of MI and its impact on idiosyncratic goal achievement and provides support for its use in increasing participants' beliefs in their ability to achieve their goals although it is evident that research in relation to MI and II and resulting goal achievement in people with depressed mood remains in its infancy.

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Executive Summary

Mentally imagining the steps involved in achieving a goal (e.g. imagining pressing the different keys in a piano piece or running a race) has been shown to improve performance and make it more likely that a goal or task will be achieved. Mental imagery (MI) has been shown to improve performance in athletes and musicians, to promote health-related behaviour (for example, increasing vitamin consumption), to increase levels of physical activity, and to increase the likelihood that an individual will engage in a particular behaviour (e.g. voting in an election). This is proposed to occur because imagining something increases the link between what we intend to do and our actions.

Making concrete plans for when, where and how individuals plan to achieve their goals (called implementation interventions; II) have also been shown to have a positive effect on behaviour (for example, increasing the amount of fruit that is eaten). Like imagery, this is proposed to happen because it allows us to identify triggers that will motivate us to take action (for example, if I get to work, then I will take the stairs).

As motivation and goal achievement can often be particularly challenging for individuals with low mood/depression, the aim of this project was to investigate the effects of MI and II on how people think about their goals. (i.e. how likely they perceived their goals were to happen, how much control they felt they had over their goals, how important the goals were and how motivated they felt). We were also interested in whether MI or II have a positive impact on goal achievement when compared to a control group. This potentially has significant implications for primary care mental health services, and cognitive behavioural therapy delivery in general. We know that individuals who complete homework tasks and re-engage in meaningful activity, amongst other important factors, tend to do better in therapy. Therefore, if we can establish and refine techniques that best enable people to re-engage with valued goals then this will hopefully enable more people to benefit from therapy.

Method

Forty-four people with primary low mood/depression were recruited from NHS primary care services. Each participant was randomly allocated to one of three groups (MI/II/Control). All participants identified three SMART goals (Goals which are Specific, Measureable, Achievable, Realistic, Time-limited) that they wanted to

achieve. Participants were asked to rate each of their goals on levels of motivation, control, importance and likelihood of achievement (on a scale from 1-7).

Participants in the MI group were encouraged to use all their senses to mentally imagine themselves completing their first goal. Those in the II group were encouraged to make concrete plans about when, where and how they wished to achieve their goals (for example, If I finish breakfast on a Saturday morning, then I will put on my trainers and do 20 minutes of yoga using my phone app). Participants in the MI and II groups re-rated their goals (on motivation, control, importance and likelihood of achievement) after using the strategy. Those in the control group were not provided with any further guidance on how they should achieve their goals.

Participants took part in a follow-up one-week later and the rate of goal achievement amongst the three groups was compared.

Results

After mentally imagining the steps involved in achieving their goal, participants in the MI group reported a significant increase in how likely they felt they were to accomplish their goals.

Individuals in the MI or II groups were not statistically more likely than people in the control group to achieve their goals. However, it is worth noting that there was a higher level of goal achievement in the MI group with 93% of those in the MI group completing their first goal, 83% of those in the II group, and 69% of those in the control group. Unfortunately, due to small numbers in the group, it is difficult to find a significant difference. The relatively high levels of goal achievement across all groups may reflect the success of devising SMART goals with planned follow-up rather than a reflection on the strategies used. Anecdotally many of the participants identified the process of making their goals SMART and knowing that they were going to receive a follow-up call as motivating factors. It is also possible that using MI or II may only be helpful when goals are perceived as difficult but may not have any impact on easy goals. Overall, participants in the current study developed goals that were rated with high levels of control, importance and motivation which may account for the lack of statistical differences between the groups.

Clinical implications

Within clinical practice, the current study suggests that generating specific goals and using MI may represent a valuable technique for improving individuals' beliefs that their goals are attainable and within their reach.

Due to the lack of sufficient power in the follow-up part of the study, it is difficult to draw strong conclusions about whether MI or II represent viable techniques for clinicians to use as a means of enhancing homework task achievement and re-engagement with valued goals within clinical practice, although it is worth noting that the higher levels of goal achievement within the MI group is promising.

The results elicited from this experimental design would benefit from replication in larger scale study to address the limitations of a small sample size.

Connecting Narrative

My research has focused on maximising the effectiveness of psychological services and interventions for service users and families. I have conducted a systematic review of the literature to investigate whether a trial of Melanie Fennell's (1997) cognitive behavioural treatment (CBT) model of low self esteem (LSE) would be supported in young people, used feedback to evaluate and improve a services of family information sessions within an early intervention for psychosis service and developed an experimental study to investigate whether mental imagery enhances goal achievement for people with low mood. This has included reflecting on policy and guidelines, reviewing available research, designing and conducting a study within the NHS, and incorporating service user feedback to improve service delivery with the aim of promoting and enhancing clinical effectiveness.

Systematic Review of the Literature

I conducted a systematic review of the literature to investigate both the co-occurrence of low self-esteem (LSE) and clinically significant anxiety and depression in young people, as well as the association between LSE and the incidence of internalising symptomatology in later adolescence and emerging adulthood. This arose from discussions with my supervisor Dr Maria Loades about the emerging success of Fennell's CBT model for LSE as a means of improving mental health symptomatology in adults. In order to ascertain whether such a trial is implicated for children and young people we discussed how it would first be important to review the evidence base to understand what is known about the relationship between LSE and internalising disorders in young people. We had teaching from Melanie Fennell during our training on the Bath course and I was very interested in this particular approach as the model, which includes cycles of both anxiety and depressive affect, made sense when I considered the presenting difficulties of many service users I have worked with in the past. Working with children is also a particular interest of mine and I felt that it was important that this was reflected within my choice of research projects.

In terms of conducting the systemic review, I learned about the importance of defining terms and devising precise research questions. I found that I massively underestimated the time and work involved in conducting a systematic review. As this topic involved a very broad search area (LSE and mental health difficulties in young people), the initial search identified thousands of search items (2000+) that it

was necessary to review to identify relevant articles. This was of course very time-consuming and involved frequent discussions to re-assess aims and terms within the review. Through this I feel I greatly improved my ability to critique research and to synthesise information into a coherent argument which is more analytic than merely descriptive.

Service Improvement Project

My service improvement project (SIP) focused on integrating a rolling programme of family information sessions within the early intervention for psychosis service in Weston super mare. This arose from my first placement within this service and discussions with my supervisor Dr Tamzin Haile, clinical psychologist at the service, who recognised that support for carers was an aspect of the service that was not as developed as the team would like. Recent guidance, in particular the Triangle of Care initiative, had become a focus at meetings within mental health services within the locality, supporting the need for family-focused sessions. This guidance emphasises carer involvement in the development of services. It was therefore agreed that I would be involved in the development and improvement of a series of family information sessions as part of my placement and that my SIP would focus on evaluating this group by gathering attendee feedback, the re-design of a further group, along with the re-evaluation of this subsequent group. This was considered to be important to maximise the benefits for families.

Conducting my SIP gave me insight into the benefits of service user involvement, alongside the ways in which this can be incorporated to bring about real change. It was beneficial to have been based within the service during my placement as knowing the team and context in which group would need to be set up was helpful. This project involved a number of processes including; review of similar groups, consultation with another service that had run the group and guidelines in relation to family information groups, practical considerations involved in running a group (booking venue, arranging time that would suit professionals and carers, contacting service users to attend, organising presentations), developing the content of group (as well as slides and resources), designing the evaluation of the group, consultation with both internal and external supervisors, and completing the necessary ethical review procedures (both local trust and university based). All of these processes needed to completed within the context of a service which was pressurized and a team that was extremely motivated

but busy. The setting up of this type of group had been on the team's agenda for quite some time but always seemed to get pushed to the bottom of the list. It was therefore perceived as helpful to have someone else championing this. Initially I tried to set up a focus group to evaluate the group but this needed to be changed due to availability of families and consideration of the commitments that families had in caring for a family member with psychosis. Instead, telephone interviews were conducted with six family members who attended, then the group was re-developed based on this feedback. This second group was then re-evaluated. On the whole, the response rate from providing feedback was relatively low which highlights some of the challenges of incorporating service user feedback as it is not always possible to get a representative sample of those who attend. There was much less written feedback provided at the second group, as well as less people expressing interest in providing additional feedback following the group. This highlights the difficulties in collecting feedback when the researcher is not present to champion this.

This was also my first real experience at conducting and analysing qualitative research. As I was new to this area, I sought support and advice from other colleagues who had more expertise in qualitative research, as well as reading available resources in the area. Despite the overall low response rate for providing feedback, transcribing and analysing nine hours worth of data was a considerable piece of work which I too underestimated. Overall, I felt that this was a very useful piece of work as the feedback from the team and participants lead to improvements in the format and content of the group. It is also positive to see that this remains an implemented program within this service. I also had the opportunity to work closely with a mental health worker and the EIP team in the designing the course, along with co-facilitating the first group and evaluating this and a subsequent group. I was supported and guided in the development of the semi-structured interview schedule and write up by my two supervisors, Dr Lorna Hogg and Dr Emma Griffith, who work in the area of severe mental illness and psychosis.

Main Research Project

Maximising the effectiveness of goal setting within therapy formed the basis of the development of my main research project. I collaborated with Dr James Gregory, who has a particular interest in the role of imagery in psychopathology. We developed an experimental study investigating whether mental imagery or implementation intentions (developing concrete plans for when, where and how a

goal is to be completed) facilitates goal achievement when compared to a control group. We were particularly interested in finding out whether mental imagery (MI) could be used to facilitate goal achievement in people with low mood, as motivation and withdrawal from valued goals is a common difficulty experienced by those who suffer from depression. This is particularly pertinent as progress and symptom improvement during therapy is often associated with engagement in homework tasks and there is a move within research to examine the 'active' ingredients of therapy.

Putting this idea into practice involved regular liaison with and networking with a wide variety of primary care services in Cheltenham, Bristol and Weston super mare. Recruitment involved presenting at team meetings, speaking at low mood groups, meeting managers and leads of services and regular phone and email contact to keep the project at the forefront of clinicians mind. I found recruiting participants to be very challenging at times, particularly as it relied on clinicians within highly pressurised and busy work environment to identify and seek consent to pass contact details to me. It was helpful to identify a person within each service who I could liaise with and as such I developed good working relationships with clinicians who saw the value of the research and championed this within their teams. Having the opportunity to speak directly to potential participants was also helpful as I imagine my enthusiasm and personal interest in the topic came through although due to the nature of depression and the reduced motivation that is often characteristic of depression, the process of recruitment was quite slow (involving over 10 months of active recruitment) and I was extremely grateful to all those who took the time to take part.

My main project also involved applying for approval from a variety of different ethical review teams including NHS-IRAS, two local NHS trusts and the university's ethics board. I found this to be quite a frustrating process that was not set up in a way that would encourage me to complete this larger scale research within the NHS again. Applying for all the necessary applications required work to be replicated in different ways on different forms, processes that were complex and unclear and was extremely lengthy with many delays. I believe the system would benefit from streamlining to encourage psychologists to engage in valuable research.

Case Studies

Completing a case study on each placement provided the opportunity to reflect on my own interventions with clients across the lifespan ranging from

adapting cognitive behavioural therapy techniques when working with a young person with anxiety and Type 1 diabetes to working with an 88 year old woman with depression. Writing and having the opportunity to reflect on the work after it was completed was helpful way of examining and also improving my clinical effectiveness. Completing at least two single case experimental design studies produced some interesting challenges as routine outcome measures are unfortunately not a feature of many of the services that I have worked in. The benefits of using outcome measures were also more visible in some cases when compared to others. For example, completing outcome measures with my client on my learning disability placement proved challenging as completing the evidence based structured assessments at each session was far too lengthy and overly complex. Using a simplified idiosyncratic rating scale also presented challenges as there were clear discrepancies between the clients scale ratings and her descriptive reports of how she was feeling so the usefulness of these particular measures is questionable.

However, on my child and adolescent mental health service (CAMHS) placement, session by session rating scales were routinely used by the service and the client I worked with in relation to panic symptoms found it extremely useful to reflect on the week by week symptom tracking questionnaire. I also found it helpful to use the session-by-session ratings to gain feedback on the session from the young person and this helped me to change and adapt the session based on the young persons needs. This is something that I have taken forward to my further placements.

Reviewing my case studies has allowed me to reflect on the development of my cognitive behavioural therapy skills and the application of these skills to different difficulties and complexities. For example, my CAMHS case study related to treatment of panic and the patient responded extremely well and quickly to cognitively informed behavioural experiments. I also completed case studies on a number of more complex clients that I worked with where it was necessary to consider the wider context, systemic issues as well as attachment related difficulties. I have definitely become more confident in my formulation skills and intervention skills, and I feel that completing a case study on each placement provided a valuable opportunity to reflect on and develop these skills. Having supervision from different supervisors, many of whom used different approaches to CBT when they work

clinically was interesting and lead to interesting viewpoints on how interventions with these clients could have been approached differently.

Future Aspirations and Further Reflections

It is easy to see how research becomes lost within a busy NHS working environment due to the often large caseloads and other competing factors. As a qualified psychologist I am keen to continue to engage in research within the NHS. In particular, I am keen to continue my involvement in service evaluation and the development of services through the use of service user feedback.

Through my own research, I have developed skills in helping clients to set SMART goals, and to use imagery as part of therapy. I have also developed skills in developing and evaluating groups which I will bring forward to services that I will work with in the future. I am keen to publish the results of my research as I recognise importance of disseminating findings. In particular, I am keen that the service users and families who took part in my research have the opportunity to hear about the results of the research and as such I will be disseminating the lay summaries to those who agreed that they would like to hear about the results of my main project. A summary of the development of the family information sessions will also be available to service users and families who are part of that service. Furthermore, I am also aiming to present the findings of my main research project at the British Association for Behavioural and Cognitive Psychotherapies (BABCP) conference in Belfast in June.

Appendix A

Guidelines for Authors: Child and Adolescent Mental Health

1. Review Articles: These papers are usually commissioned; they should survey an important area of interest within the general field.

2. Submission of a paper to *Child and Adolescent Mental Health* will be held to imply that it represents an original article, not previously published; that it is not being considered for publication elsewhere; and that if accepted for publication it will not be published elsewhere without the consent of the Editors.

3. Manuscripts should be submitted online. For detailed instructions please go to: http://mc.manuscriptcentral.com/camh_journal and c*heck for existing account* if you have submitted to or reviewed for the journal before, or have forgotten your details. If you are new to the journal c*reate a new account.* Help with submitting online can be obtained from Piers Allen at ACAMH (e-mail Piers.Allen@acamh.org.uk)

4. Authors' professional and ethical responsibilities

Disclosure of interest form

All authors will be asked to download and sign a full Disclosure of Interests form and acknowledge this and sources of funding in the manuscript.

Ethics

Authors are reminded that the *Journal* adheres to the ethics of scientific publication as detailed in the *Ethical principles of psychologists and code of conduct* (American Psychological Association, 2010). These principles also imply that the piecemeal, or fragmented publication of small amounts of data from the same study is not acceptable. The Journal also generally conforms to the Uniform Requirements for Manuscripts of the International Committee of Medical Journal Editors (ICJME) and is also a member and subscribes to the principles of the Committee on Publication Ethics (COPE).

Informed consent and ethics approval

Authors must ensure that all research meets these ethical guidelines and affirm that the research has received permission from a stated Research Ethics Committee (REC) or Institutional Review Board (IRB), including adherence to the legal requirements of the study county. Within the Methods section, authors should indicate that 'informed consent' has been appropriately obtained and state the name of the REC, IRB or other body that provided ethical approval. When submitting a manuscript, the manuscript page number where these statements appear should be given.

Note to NIH Grantees

Pursuant to NIH mandate, Wiley-Blackwell will post the accepted version of contributions authored by NIH grant-holders to PubMed Central upon acceptance.

This accepted version will be made publicly available 12 months after publication. For further information, seewww.wiley.com/go/nihmandate.

Manuscripts reporting systematic reviews or meta-analyses should conform to the PRISMA Statement.

The Equator Network is recommended as a resource on the above and other reporting guidelines for which the editors will expect studies of all methodologies to follow. Of particular note are the guidelines on qualitative work http://www.equator-network.org/reporting-guidelines/evolving-guidelines-for-publication-of-qualitative-research-studies-in-psychology-and-related-fields and on quasi-experimental http://www.equator-network.org/reporting-guidelines/the-quality-of-mixed-methods-studies-in-health-services-research and mixed method designs http://www.equator-network-or/reporting-guidelines/guidelines-for-conducting-and-reporting-mixed-research-in-the-field-of-counseling-and-beyond

CrossCheck
An initiative started by *CrossRef* to help its members actively engage in efforts to prevent scholarly and professional plagiarism. The journal to which you are submitting your manuscript employes a plagiarism detection system. By submitting your manuscripts to this journal you accept that your manuscript may be screened for plagiarism against previously published works.
5. Manuscripts should be double spaced and conform to the house style of *CAMH*. The first page of the manuscript should give the title, name(s) and address(es) of author(s), and an abbreviated title (running head) of up to 80 characters. Specify the author to whom correspondence should be addressed and provide their full mailing and email address.

Summary: Authors should include a structured Abstract not exceeding 250 words under the sub-headings: Background; Method; Results; Conclusions.

Keywords: Please provide 4-6 keywords (use MeSH Browser for suggestions).

Key Practitioner Message: (in the form of 3-6 bullet points) should be given below the Abstract, highlighting what's known, what's new and the direct relevance of the reported work to clinical practice in child and adolescent mental health.

6. Papers submitted should be concise and written in English in a readily understandable style, avoiding sexist and racist language. Original Articles should not exceed 5,500 words, including References and Tables. Occasionally, longer articles may be accepted after negotiation with the Editors. Authors should include a word count of their paper. .

7. Headings: Original articles should be set out in the conventional format: Methods, Results, Discussion and Conclusion. Descriptions of techniques and methods should only be given in detail when they are unfamiliar. There should be no more than three (clearly marked) levels of subheadings used in the text.

8. All manuscripts should have an Acknowledgement section at the end of the main text, before the References. This should include statements on the following:

Study funding: Please provide information on any external or grant funding of the work (or for any of the authors); where there is no external funding, please state this explicitly.

Conflicts of interest: Please disclose any conflicts of interest of potential relevance to the work reported for each of the authors. If no conflicts of interest exist, please include an explicit declaration of the form: "The author(s) have declared that they have no competing or potential conflicts of interest".

Contributorships: Please state any elements of authorship for which particular authors are responsible, where contributionships differ between the author group. (All authors must share responsibility for the final version of the work submitted and published; if the study includes original data, at least one author must confirm that he or she had full access to all the data in the study, and takes responsibility for the integrity of the data and the accuracy of the data analysis). Contributions from others outside the author group should also be acknowledged (e.g. study assistance or statistical advice) and collaborators and study participants may also be thanked.

10. For referencing, *CAMH* follows a slightly adapted version of APA Style http:www.apastyle.org/. References in running text should be quoted showing author(s) and date. For up to three authors, all surnames should be given on first citation; for subsequent citations or where there are more than three authors, 'et al.' should be used. A full reference list should be given at the end of the article, in alphabetical order.

References to journal articles should include the authors' surnames and initials, the year of publication, the full title of the paper, the full name of the journal, the volume number, and inclusive page numbers. Titles of journals must not be abbreviated. References to chapters in books should include authors' surnames and initials, year of publication, full chapter title, editors' initials and surnames, full book title, page numbers, place of publication and publisher.

11. Tables: These should be kept to a minimum and not duplicate what is in the text; they should be clearly set out and numbered and should appear at the end of the main text, with their intended position clearly indicated in the manuscript.

12. Figures: Any figures, charts or diagrams should be originated in a drawing package and saved within the Word file or as an EPS or TIFF file. Seehttp://authorservices.wiley.com/bauthor/illustration.asp for further guidelines on preparing and submitting artwork. Titles or captions should be clear and easy to read. These should appear at the end of the main text.

13. Footnotes should be avoided, but end notes may be used on a limited basis.

Review Articles

These papers are usually commissioned; they should survey an important area of interest within the general field of child and adolescent mental health disorders and services. Suggestions for topics and proposals (outline and/or draft abstract) may be sent to the CAMH Editorial Officecamh@acamh.org

Manuscript Processing

Peer Review Process: All material submitted to CAMH is only accepted for publication after being subjected to external scholarly peer review, following initial evaluation by one of the Editors. Both original and review-type articles will usually be single-blind reviewed by a minimum of two external referees and only accepted by the decision Editor after satisfactory revision. Any appeal of an editorial decision will first be considered by the initial decision Editor, in consultation with other Editors. Editorials and commissioned editorial opinion articles will usually be subject to internal review only, but this will be clarified in the published Acknowledgement section. Editorial practices and decision making will conform to COPE http://publicationethics.org/resources/guidelines and ICMJE http://icmje.org/ best practice.

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Appendix B

Guidelines for authors: Journal of Mental Health

Submissions

All submissions, including book reviews, should be made online at Journal of Mental Health's Manuscript Central site at http://mc.manuscriptcentral.com/cjmh

New users should first create an account. Once a user is logged onto the site submissions should be made via the Author Centre. Please note that submissions missing reviewer suggestions are likely to be un-submitted and authors asked to add this information before resubmitting. Authors will be asked to add this information in section 4 of the on-line submission process.

Manuscripts will be dealt with by the Executive Editor. It is essential that authors pay attention to the guidelines to avoid unnecessary delays in the evaluation process.

The names of authors should not be displayed on figures, tables or footnotes to facilitate blind reviewing.

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The Editors and Taylor & Francis Group are committed to the highest academic, professional, legal, and ethical standards in publishing work in this journal. To this end, we have adopted a set of guidelines, to which all submitting authors are expected to adhere, to assure integrity and ethical publishing for authors, reviewers, and editors.

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Word Count

The total word count for review articles should be no more than 6000 words. Original articles should be no more than a total of 4000 words. We do not include the abstract, tables and references in this word count. However manuscripts are limited to a maximum of 4 tables and 2 figures.

Manuscript Style

Manuscripts should be typed double-spaced (including references), with margins of at least 2.5cm (1 inch). The cover page (uploaded separately from the main manuscript) should show the full title of the paper, a short title not exceeding 45 characters (to be used as a running title at the head of each page), the full names, the exact word length of the paper and affiliations of authors and the address where the work was carried out. The corresponding author should be identified, giving full postal address, telephone, fax number and email address if available. To expedite blind reviewing, no other pages in the manuscript should identify the authors. All pages should be numbered.

Abstracts: The first page of the main manuscript should also show the title, together with a structured abstract of no more than 200 words, using the following headings: Background, Aims, Method, Results, Conclusions, Declaration of interest. The declaration of interest should acknowledge all financial support and any financial relationship that may pose a conflict of interest. Acknowledgement of individuals should be confined to those who contributed to the article's intellectual or technical content.

Keywords: Authors will be asked to submit key words with their article, one taken from the pick-list provided to specify subject of study, and at least one other of their own choice.

Text: Follow this order when typing manuscripts: Title, Authors, Affiliations, Abstract, Keywords, Main text, Appendix, References, Figures, Tables. Footnotes should be avoided where possible. The total word count for review articles should be no more than 6000 words. Original articles should be no more than a total of 4000 words. We do not include the abstract, tables and references in this word count. Language should be in the style of the APA (see Publication Manual of the American Psychological Association, Fifth Edition, 2001).

Style and References: Manuscripts should be carefully prepared using the aforementioned Publication Manual of the American Psychological Association, and all references listed must be mentioned in the text. Within the text references should be indicated by the author’s name and year of publication in parentheses, e.g. (Hodgson, 1992) or (Grey & Mathews 2000), or if there are more than two authors (Wykes et al ., 1997). Where several references are quoted consecutively, or within a single year, the order should be alphabetical within the text, e.g. (Craig, 1999; Mawson, 1992; Parry & Watts, 1989; Rachman, 1998). If more than one paper from the same author(s) a year are listed, the date should be followed by (a), (b), etc., e.g. (Marks, 1991a).

The reference list should begin on a separate page, in alphabetical order by author (showing the names of all authors), in the following standard forms, capitalisation and punctuation: a) For journal articles (titles of journals should not be abbreviated):

Grey, S.J., Price, G. & Mathews, A. (2000). Reduction of anxiety during MR imaging: A controlled trial. Magnetic Resonance Imaging, 18, 351–355. b) For books:

Powell, T.J. & Enright, S.J. (1990) Anxiety and Stress management. London: Routledge

c) For chapters within multi-authored books:

Hodgson, R.J. & Rollnick, S. (1989) More fun less stress: How to survive in research. In

G.Parry & F. Watts (Eds.), A Handbook of Skills and Methods in Mental Health Research (pp. 75–89). London:Lawrence Erlbaum.

Tables and Figures: Tables and figures should not be embedded in the text, but should be included as separate sheets or files. A short descriptive title should appear above each table with a clear legend and any footnotes suitably identified below. All units must be included. Figures should be completely labeled, taking into account necessary size reduction.

Captions should be typed, double-spaced, on a separate sheet. All original figures should be clearly marked with the number, author's name, and top edge indicated.

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Illustrations: Illustrations submitted (line drawings, halftones, photos, photomicrographs, etc.) should be clean originals or digital files. Digital files are recommended for highest quality reproduction and should follow these guidelines:

- 300 dpi or higher
- sized to fit on journal page
- EPS, TIFF, or PSD format only
- submitted as separate files, not embedded in text files

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with more than four pages of color. Art not supplied at a minimum of 300 dpi will not be considered for print.

Page Proofs: All proofs must be corrected and returned to the publisher within 48 hours of receipt. If the manuscript is not returned within the allotted time, the editor will proofread the article and it will be printed per the editor's instruction. Only correction of typographical errors is permitted.

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Copyright

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Appendix C

Invitation Letter: Group 1

Avon and Wiltshire NHS
Mental Health Partnership NHS Trust

North Somerset Early Intervention Service
Coast Resource Centre
Diamond Batch
Locking Castle
Weston-super-Mare
BS24 7FY
Tel: 01934 523 70
Mob. 07717 571798

Dear (name),

The Early Intervention for Psychosis team would like to invite you to a focus group which will take place on the 17th of July (6.15pm-7.30pm) at the Coast Resource Centre, Weston super Mare, BS24 7AY. The aim of this focus group is to think about service improvement for families and how we can improve this group to best meet your needs.

If you are unable to attend the focus group but are interested in offering input, then there is also the option of having a telephone interview. I have attached an information sheet which provides further details on the focus group.

If you would like to attend/ arrange a telephone interview then please contact Sophie Turton, EIP mental health worker on 0193452370 or email me on lisakeane@nhs.net. If you have any questions or concerns then I would be more than happy to discuss.
Yours sincerely,

Lisa Keane,
Trainee Clinical Psychologist
Project Supervisor
Dr Tamzin Haile, Clinical Psychologist

Appendix D

Invitation Letter: Group 2

Private and Confidential
address

North Somerset Early Intervention Team
Coast Resource Centre
Diamond Batch
Locking Castle
Weston-Super-Mare
BS24 7FY
Tel: (01934) 523700
Fax: (01934) 520423

16th April 2015
Dear (name),

Thank you for attending the recent Family Information sessions we held throughout March 2015. We hope you found these helpful.
As part of the evaluation process, we would like to give you the opportunity to provide any feedback about the content and delivery of these sessions. Any feedback we receive will help us to develop this service to ensure the sessions we provide reflect the needs of the families we work with.
Lisa Keane is a Trainee Clinical Psychologist who worked with our team between November 2013 and June 2014, and helped us set up these sessions. Lisa is offering telephone interviews to enable you to provide your feedback, if you wish to participate.
Please find enclosed an Information Sheet and Consent Form. If you would like to participate in a telephone interview with Lisa, please read and complete the consent form, including your telephone number, and send this to:

Lisa Keane, Trainee Clinical Psychologist, Dept. of Clinical Psychology,
6 West, University of Bath,
Claverton Down Road,
Bath, BA2 7AY

Please note the information sheet does state a provisional date for a focus group as 4th April 2015, which we are aware has passed. Please speak to Lisa about arranging a focus group at another time if you are interested in this option.
If you have an questions please do not hesitate to contact me directly on (01934) 523700.
Yours sincerely,

Sophie Turton
Community Mental Health Worker
North Somerset Early Intervention Team

Appendix E
Participant Information Sheet: Group 1

Information Sheet

Title of Project
Improving family involvement in the North Somerset Early Intervention for Psychosis Service: The collaborative development of a multiple family psycho-education group

Invitation
You are invited to take part in a focus group as you attended the Family Information sessions held by the Early Intervention for Psychosis Team in February/ March 2014.

What will this involve?
This will involve attending a focus group with other families who attended/ or expressed interest in attending the group. The aim of this focus group is to ensure that this group meets family's needs and to think about ways in which this group could be improved (e.g. further information needed/ different format/ style).

Time commitment
One evening for 1-2 hours on a Thursday evening.

Participant rights
Your participation in this group is voluntary.
You may decide to stop being part of this research without explanation. If you decide that you do not wish the information you supplied to be included in the research then you can ask for it to be destroyed at any point.
You do not have to respond to any questions which you do not wish to answer.

Risks
The questions asked during the focus group/ telephone interviews will be based on service improvement. However, if you do become upset for whatever reason, there will be the opportunity to discuss your concerns with one of the EIP team members. Your care coordinator will follow-up any concerns with you.

Confidentiality
The information collected will be kept securely. All information provided will be anonymised and you will not be identifiable.

Recording
The focus group will be audio-recorded. Once transcribed, the recording will be deleted. If you consent to the session being recorded, you will be asked to complete a consent form.

Dissemination
A copy of the findings will be shared with participants and information collected will be shared with the team and used to revise future groups.

Data collected during the focus group/ telephone interviews will also be submitted as part of course work for the Doctorate of Clinical Psychology at University of Bath. In order to share information more widely, this information will be written up as a journal article and will be submitted to an academic journal. Participants will not be identifiable within the published research.

Contact details
Lisa Keane
Trainee Clinical Psychologist
lisakeane@nhs.net

Tamzin Haile
Project Supervisor, Clinical Psychologist Early Intervention for Psychosis Team
Tamzin.haile@nhs.net

Lorna Hogg
University Supervisor
L.I.Hogg@bath.ac.uk

Emma Griffith
University Supervisor
ejg39@bath.ac.uk

Appendix F

Participant Information Sheet: Group 2

Information Sheet

Title of Project

The development and improvement of family information sessions in the North Somerset Early Intervention for Psychosis Service

Invitation

We would like to invite you to provide feedback following your attendance at the family information sessions. The aim of this research project is to think about what you would like to get from this type of group, and to discuss any ideas you have for improving these types of sessions in Early Intervention for Psychosis services.

What will this involve?

There are two options for taking part; either by attending a focus group, or arranging a telephone interview with the researcher. Please let Sophie Turton or Lou Hamilton from the EI team know if you are interested in taking part. They will ask you to sign a consent form, and I will contact you to discuss the project.

If enough people (approximately 4+) are interested in attending the focus group, then a provisional date for this could be April 4th at 6.30. This can of course be changed depending on your availability.

Participant rights

Your participation in this group is voluntary.

You may decide to stop being part of this research without explanation. If you decide that you do not wish the information you supplied to be included in the research then you can ask for it to be destroyed at any point.

You do not have to respond to any questions which you do not wish to answer.

Risks

The questions asked during the focus group/ telephone interviews will be based on service improvement. However, if you do become upset for whatever reason, there will be the opportunity to discuss your concerns with one of the EIP team members. Your care coordinator will follow-up any concerns with you.

Confidentiality

The information collected will be kept securely. All information provided will be anonymised and you will not be identifiable.

Recording

The focus group/ telephone interview will be audio-recorded for transcription purposes.

Dissemination

A copy of the findings will be shared with participants and information collected will be shared with the team and used to revise future groups.

Data collected during the focus group/ telephone interviews will also be submitted as part of course work for the Doctorate of Clinical Psychology at University of Bath. In order to share information more widely, this information will be written up as a journal article and will be submitted to an academic journal. Participants will not be identifiable within the published research.

Thank you for your time. Please feel free to contact me on the email address below with any questions you might have.

Kind regards,

Lisa

Contact details

Lisa Keane

Trainee Clinical Psychologist

lisakeane@nhs.net

Tamzin Haile

Project Supervisor, Clinical Psychologist Early Intervention for Psychosis Team

Tamzin.haile@nhs.net

Lorna Hogg

University Supervisor

L.I.Hogg@bath.ac.uk

Emma Griffith

University Supervisor

ejg39@bath.ac.uk

Appendix G

Participant Consent Form

Improving family involvement in the North Somerset EIP Service: The collaborative development of a multiple family information group

Name of Researcher:
Lisa Keane
Trainee Clinical Psychologist

Research Supervisors:
Dr Tamzin Haile
EIP Service

Dr Lorna Hogg
Dr Emma Griffith
Bath University

I confirm that I have read and understood the information sheet for the above study. ☐

I understand that my participation is voluntary and that I am free to withdraw at any time. I understand that I do not have to give a reason for withdrawing from the study. ☐

I agree for the information I supply to be used in the above study. ☐

I consent to the interview being audio-recorded. ☐

_____ _____
Name of Participant Date

_____ _____
Name of Researcher Date

Appendix H

Semi-structured interview schedule

- What kind of information do you feel that you would want to get from this group? What would be the best way of delivering this information?
- Are the current topics useful?
- What support do you feel that you need? How can we make the group more supportive?
- Is a group the best way of getting support or are there other ways that you think might be more effective?
- At what stage of your family members recovery do you feel that this type of group would be the most helpful?
- How do you feel about attending groups together with your family member (service users)?
- What makes it difficult to come to a group?
- What would you like to gain from attending this type of session? How do you feel about filling out questionnaires to evaluate the group?
- Has the group helped with getting to know the team? Has the group affected the likelihood that you will contact the team if required?

Appendix I

Lay summary of project

Summary of service improvement project

What is this information sheet about?

This information sheet has been developed to inform you about the outcome of a recent service improvement project. The aim of this project was to evaluate a series of family information sessions run by the North Somerset Early Intervention Service. This is a very brief summary of what we found.

How did we do this?

A number of family members who attended two family information session groups (In February/ March 2015 and March/ April 2015) took part in follow-up telephone interviews. Feedback collected was used to evaluate and improve the delivery of family information sessions within the service.

What did we find?

We learned that families perceive there to be lots of benefits to attending these types of groups. These include having the opportunity to meet with other families (to learn from others and to share), the opportunity to meet all the members of the team, the opportunity to learn and develop their understanding of psychosis. Families appreciated that the group was informal and that they felt able to ask questions and to speak to the team.

By speaking with families, we also found that there are lots of different things to consider when running these types of groups; for example, that families have lots of different needs so the group needs to be flexible to adapt to this, and that evening sessions can be difficult after a busy day. Some people felt that delivering information in a group might not suit some people because they dislike groups. Most people also felt that the group would have been helpful earlier on in their involvement in the service. There were mixed views about whether service users should be invited to the group too. It was felt that having a separate discussion group for families might be helpful, so that this group could focus on information-giving and answering questions.

Recommendations

We took everyone's recommendations into account, and changed the format and venue for the second group run in March 2015. The information was simplified, and an extra session was added. Some extra information was also added in (for example, on how psychosis can impact on siblings).

What we did next?

We also interviewed family members who attended the group in March / April 2015, and also asked how they found the group. The families reported similar positive aspects of the group. Some additional recommendations were also made which the service will take forward in developing future groups.

Thank you

A special thank you to all those who attended the family information sessions and for all those who contributed to the feedback. The team are very grateful for your support in developing this aspect of the service. This is just a very brief summary of some of the main points. Everyone's individual feedback was shared with the team in developing the new series of family information sessions.

IF you have any questions or queries, or are interested in finding out more then please contact me on lk372@bath.ac.uk

With best wishes,

Lisa Keane

Trainee Clinical Psychologist

Supervised by:

Early Intervention for Psychosis Service: Dr Tamzin Haile

University of Bath: Dr Lorna Hogg & Dr Emma Griffith

Appendix J

Ethical approval for service improvement project: University of Bath

Psychology Ethics Committee <psychology-ethics@bath.ac.uk>
Mon 09/06/2014 14:42
Inbox

To: Lisa Keane;

MessageHeaderAnalyzer

Dear Lisa

Reference Number 14-148

Thank you for satisfactorily attending to the queries raised by the committee. I can now confirm that you have full ethical approval for your study.

Best wishes with your research.

--
Dr Helen Lucey
Chair Psychology Ethics Committee
University of Bath

Appendix K

Ethical Approval: AWP Service Evaluation

Avon and Wiltshire Mental Health Partnership AWP Trust
Service Evaluation
Blackberry Centre
Blackberry Hill Hospital
Manor Road
Fishponds
BS16 2EW
0117 378 4238

Lisa Keane
Psychological Therapies Service
Coast Resource Centre
Weston Super Mare
BS24 7FY

Date: 9th January 2014
Ref: 2014.E002

Dear Lisa

Evaluation title: Early Intervention for psychosis: Evaluating a family education group

This letter is to confirm that your evaluation is now registered with us and also provides you with our reference number.

We are available to provide you with advice and support for your evaluation as and when you require. If you do need any support or information, please contact us using the contact details above, quoting our reference number for your study. I would also like to direct you to our website http://ourspace/staffservices/ftoj/innovation/pages/evaluation.aspx which contains information, links and tools that you may find useful to your evaluation.

The importance of disseminating all evaluation work cannot be over emphasised. It is only by sharing our learning that we can improve services across AWP. For this reason, the findings of all evaluation work should be reported to the Evaluation team via email. The team will champion the results of service evaluations, and work with evaluators to ensure those results are disseminated and acted upon, and that the results of evaluations are reflected in future service delivery. The team may work with evaluators to produce publications for the public domain.

I very much look forward to hearing from you regarding your evaluation and look forward to receiving the results of your evaluation in due course.

Yours sincerely,

Janet Brandling

Appendix L1

Thematic Map-Group 1

Positive aspects/ benefits of attendance

Receiving relevant information Learning more about topics/ Increasing understanding
Sharing information sheets with other family members
Hearing person with personal experience speak

Delivery of Information

Opportunity to hear information again/ different way
Opportunity for questions
More personal than internet
Informal
Level of interaction decided by parents
Tea/ coffee
Lecture-style- focused

Space to share with other families

Learning from others
Normalising
Connecting with other families 'In same boat '

Team aspects

Acting as safety net/ feeling able to contact
Opportunity to speak with team members/ different expertise

Time/ Location

Challenges

Accommodating different families needs

Different information required at different stages
Preferences for interaction
Different preference for providing feedback (written vs verbal)
Different levels of prior knowledge

Practical considerations

Transport
Fitting in with busy lifestyles
Vastness of topic/vagueness

Managing confidentiality/ boundaries

Allowing families to express themselves vs maintaining confidentiality vs keeping on track

Subject Matter/ Topics

Breath of topic

Preference for individual vs group support

Feeling uncomfortable in groups
Preference for individual support

Potential barriers to attending group

Personal/ Emotive topic
Stigma

Impact of Caring

Positive aspects of caring

Experience of recovery

Increasing knowledge/ learning about psychosis

Positive relationships

Negative aspects of caring

'Up and down'

Feelings of guilt/ responsibility

Feeling alone

Feeling ill-equipped to deal particularly early on

Recommendations

Further information required

Pre-course information (further details)- reassurance that families can remain anonymous

Information on siblings

Improving clarity of information

Simplifying information- removing jargon

Improving presentation style

Reducing amount of information –(addition of fifth session)

Structure

Keeping to time

Timing of group

Offering group earlier in involvement

Having time devoted to discussing personal experiences

Time set-aside during group or offering separate group so that group focused on questions and information giving

Providing different options for feedback

Appendix L2

Thematic Map- Group 2

Positive aspects of attendance
Perceived as helpful/ beneficial
Receiving relevant information
Learning more about topics/ Increasing understanding
Topics relevant
Acknowledging role of carers
Up to date information from experts
Delivery of Information
Time efficient way of delivering information
Having snacks
Right amount of information (5 sessions considered appropriate)
Hand-outs/ Literature
No pressure to speak
Hopeful and optimistic
Opportunity for questions
Space to share with other families
Sharing ideas
Team aspects
Welcoming and friendly
Building relationship

Challenges
Accommodating different families needs
Meeting the needs of very different families
Managing confidentiality/ boundaries
Difficulties managing boundaries – wanting to hear information but other families wanting to discuss personal experiences (one participant)
Practical considerations
Tired in evenings
Preference for individual vs group support
Not feeling confident enough to ask questions in group setting
Not suiting 'private' families
Who for?
Information sessions for family members (separate space from service users)

Impact of Caring
Positive aspects of caring
Experiences of recovery
Negative aspects of caring
Distress during initial psychosis
Hospital admissions- feeling unknowledgeable

Recommendations
Further information
Information sheet containing team names and information
Group set-up
Delaying start time by 15mins (until 6.15pm)
Advertising more widely
More time to speak individually to staff
Timing of group
Offering group earlier in involvement
Having time devoted to discussing personal experiences
Offering separate group
Feedback
Offering different forms of feedback (written, telephone)

Appendix M

Author Guidelines: Journal of Behaviour Research and Therapy

The major focus of *Behaviour Research and Therapy* is an experimental psychopathology approach to understanding emotional and behavioral disorders and their prevention and treatment, using cognitive, behavioral, and psychophysiological (including neural) methods and models. This includes laboratory-based experimental studies with healthy, at risk and subclinical individuals that inform clinical application as well as studies with clinically severe samples. The following types of submissions are encouraged: theoretical reviews of mechanisms that contribute to psychopathology and that offer new treatment targets; tests of novel, mechanistically focused psychological interventions, especially ones that include theory-driven or experimentally-derived predictors, moderators and mediators; and innovations in dissemination and implementation of evidence-based practices into clinical practice in psychology and associated fields, especially those that target underlying mechanisms or focus on novel approaches to treatment delivery. In addition to traditional psychological disorders, the scope of the journal includes behavioural medicine (e.g., chronic pain). The journal will not consider manuscripts dealing primarily with measurement, psychometric analyses, and personality assessment.

The Editor and Associate Editors will make an initial determination of whether or not submissions fall within the scope of the journal and/or are of sufficient merit and importance to warrant full review.

Early Career Investigator Award

This award is open to papers where the first author on the accepted papers is within 7 years of their PhD. By endorsing candidature for the annual Early Career Investigator Award, your manuscript will be reviewed by the Associate Editors/Editor-in-Chief for an annual award for the most highly rated paper. The winner will be announced in print, and will have the option of being spotlighted (photo and short bio).

The CONSORT guidelines (http://www.consort-statement.org/?) need to be followed for protocol papers for trials; authors should present a flow diagramme and attach with their cover letter the CONSORT checklist. For meta-analysis, the PRISMA (http://www.prisma-statement.org/?) guidelines should be followed; authors should present a flow diagramme and attach with their cover letter the PRISMA checklist. For systematic reviews it is recommended that the PRISMA guidelines are followed, although it is not compulsory. ***Contact details***

Any questions regarding your submission should be addressed to the Editor in Chief:

Professor Michelle G. Craske
Department of Psychology
310 825-8403
Email: brat@psych.ucla.edu

Ethics in publishing

Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

Article structure *Subdivision*

Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross-referencing text: refer to the subsection by heading as opposed to simply 'the text'.

Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Essential title page information

• ***Title.*** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

• ***Author names and affiliations.*** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.

• ***Corresponding author.*** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**

• ***Present/permanent address.*** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract

A concise and factual abstract is required with a maximum length of 200 words. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

Graphical abstract

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

Authors can make use of Elsevier's Illustration and Enhancement service to ensure the best presentation of their images and in accordance with all technical requirements: Illustration Service.

Highlights

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view example Highlights on our information site.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, to be chosen from the APA list of index descriptors. These keywords will be used for indexing purposes.

Abbreviations

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Formatting of funding sources

List funding sources in this standard way to facilitate compliance to funder's requirements:
Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:
This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Shorter communications

This option is designed to allow publication of research reports that are not suitable for publication as regular articles. Shorter Communications are appropriate for articles with a specialized focus or of particular didactic value. Manuscripts should be between 3000-5000 words, and must not exceed the upper word limit. This limit includes the abstract, text, and references, but not the title page, tables and figures.

Appendix N:

Participant Invitation Letter

Lisa
Keane
Chief Investigator
Clinical Psychology Training Programme
University of Bath
6 West
Claverston Down
Bath
BA2 7AY

Dear

Thank you for your interest in the project 'What helps with achieving goals when feeling low?' I have attached an information sheet providing information on the study and the condition to which you have been randomly assigned. If you are eligible to take part, and decide that you would like to participate, you will receive an information sheet at the end of the study providing information on the technique(s) used by the other groups.

If you wish to take part in the screening process, then please complete the attached questionnaires. However if you do not have time, then please do not worry as these can also be completed over the phone.

To be eligible for this study, the main difficulty for which you are seeking treatment should be depression/ low mood (this will also be assessed during the mental health screen), and you must score above a cut-off for at least mild depression on the Patient Health Questionnaire (PHQ-9). If you meet these criteria, then you will be able to progress to the next stage. Unfortunately, those who do not meet the above criteria in the screening process will not progress to taking part in the research.

I will be in contact over the next few days to ask whether you are interested in continuing. I will try and contact you at _____. If you have another preferred time, then please could you let me know when it would be best to contact you by emailing me on lk372@bath.ac.uk or contacting me on XXXXXX.

Please note that the study can be completed over the phone.

Thank you again for your interest in the project, and I look forward to speaking with you soon.

Yours sincerely,

Lisa Keane, Clinical Psychologist in Training, Supervised by Dr James Gregory, Academic Supervisor

Appendix O1
General Information Sheet

Department of Psychology | UNIVERSITY OF BATH

General Information Sheet

What methods are best for helping us to achieve our goals? Are you interested in helping us to find out?

Invitation

We know that goal achievement can be particularly challenging if you experience low or depressed mood. Part of the intervention for low mood involves increasing activity levels (known as behavioural activation) and we would like to think about techniques that might motivate and encourage people to carry out their chosen tasks. Your goals might relate to things that you used to do but don't do anymore. For example; doing the vacuum cleaning, or going out for a walk.

My name is Lisa Keane, and I am a clinical psychologist in training at the University of Bath. Along with my supervisor, Dr James Gregory, and a number of colleagues working in psychology services in the South West, we are interested in investigating and comparing techniques which could potentially help people to carry out their goals. The research is sponsored by the University of Bath.

Eligibility

To be eligible for this study, the main difficulty for which you are seeking treatment should be depression/ low mood (this will also be assessed during the mental health screen), and you must score above a cut-off for at least mild depression on the Patient Health Questionnaire (PHQ-9). If you meet these criteria, then you will be able to progress to the next stage. Please note those who do not meet the above criteria in the screening process will not be able to take part in the research.

If you wish to take part, then please reply as soon as possible. Recruitment for this study will end in February 2016.

What would it involve and how much time will it take?

- Part 1: If you are interested in taking part, then you will receive an information pack in the post with details of the project, a consent form, and a number of questionnaires.
- The researcher will contact you by phone, and ask you to complete some demographic details, complete an interview regarding your mental health, and collect the scores to some questionnaires that you will have received in the post to check whether you meet the above eligibility criteria. If so, then you will be able to progress to the next stage.
- If you meet the eligibility criteria, the researcher will then ask you to pick three goals that you would like to achieve over the upcoming week. This would be a great opportunity to set yourself the task of achieving some of your personal goals. Depending on the condition you have been allocated to, you may be encouraged to use a particular technique to help you to achieve your goal. This should take less than one hour to complete.

- Part 2: One week later you will be asked how many of these goals you achieved. There will also be some follow-up questions about how you went about each of these goals. This can be done over the phone, face-to-face or by signing into an online survey. This will take approximately 15 minutes to complete.

Reimbursement for your time

Participants will receive a £5 voucher for taking part in this study.

What are my rights?

Your participation in this group is voluntary.
You may decide to stop being part of this research without explanation. If you decide that you do not wish the information you supplied to be included in the research then you can ask for it to be destroyed at any point. Your treatment will not be affected if you decide to withdraw from the study.
You do not have to respond to any questions which you do not wish to answer.

What are the risks and benefits of taking part?

In terms of benefits, you might find some of the techniques useful and continue to use them after the study. In terms of risks, there are no expected risks to taking part. You are welcome to have someone else with you if it would make it easier to take part in the study.

Is the study confidential?

Information collected will be confidential unless there are concerns about harm to yourself or someone else. If this occurs, we have a duty of care to inform the primary clinical service.
All information provided for data analysis and within any published work will be anonymised. Information will be stored securely.

What if there is a problem?

If you have any complaints about the study, then please contact the researcher Lisa Keane, Trainee Clinical Psychologist, or research supervisor, Dr James Gregory, in the first instance. If you would like to speak to someone not directly involved in the research, then please contact the patient advice and liaison service. Further information is available on the NHS choices website.

Every care will be taken to ensure your safety during the course of the study. University of Bath, the Research Governance Sponsor of the study has indemnity (insurance) arrangements in place for non-negligent harm, in the event that something does go wrong and you are harmed as a result of taking part in the research study. If you are harmed due to someone's negligence, then you may have grounds for legal action but you may have to pay for it.

What happens after the study has ended?

Participants will receive a debrief sheet at the end of the study detailing the techniques used by all groups. Participants are invited to provide their email address/ postal address during the study if they wish to receive the results of the study once the data has been analysed.
Findings from this research study will be submitted as part of the academic requirements for the Doctorate of Clinical Psychology at University of Bath. In order to share information more widely, this information will be written up as a journal article and will be submitted to an academic journal.

How do I contact the researcher?

Lisa Keane
Clinical Psychologist in Training
University of Bath
Lk372@bath.ac.uk
Contact number: XXXX

Dr James Gregory
Academic Supervisor
University of Bath
J.D.Gregory@bath.ac.uk

Appendix O2
Participant Information Sheet: Mental Imagery Condition

Department of Psychology | UNIVERSITY OF BATH

Information Sheet: Mental Imagery

Can imagining the successful completion of a goal help us to achieve it?

Research Idea

Research, particularly in the area of sports psychology, suggests that those who vividly imagine themselves carrying out a particular goal are more likely to achieve it. This is proposed to occur because mental practice and actual performance activate similar networks in the brain.

My name is Lisa Keane, and I am a clinical psychologist in training at the University of Bath. Along with my supervisor, Dr James Gregory, and a number of colleagues working in psychology services in the South West, we are interested in investigating and comparing techniques which could potentially help people to carry out their goals. The research is sponsored by the University of Bath.

Invitation

We know that goal achievement can be particularly challenging if you experience low or depressed mood. Part of the intervention for low mood involves increasing activity levels (known as behavioural activation). We would like to investigate different techniques that might motivate and encourage people to carry out their chosen tasks. Your goals might relate to things that you used to do but don't do anymore. For example; doing the vacuum cleaning, or going out for a walk.

Eligibility

To be eligible for this study, the main difficulty for which you are seeking treatment should be depression/ low mood (this will also be assessed during the mental health screen), and you must score above a cut-off for at least mild depression on the Patient Health Questionnaire (PHQ-9). If you meet these criteria, then you will be able to progress to the next stage. Please note those who do not meet the above criteria in the screening process will not be able to take part in the research.

What would it involve?

- Part 1: After receiving an information pack in the post, you will be contacted by the researcher to discuss the research. If you agree that you would like to participate you will be asked to complete some questions about yourself and your mental health, and to provide answers to a few questionnaires. If you are eligible for the study, the researcher will ask you to pick three goals that you would like to achieve over the upcoming week.
- The researcher will run through a mental imagery task with you, in which you will be asked to imagine yourself successfully completing one of these goals. This will involve using all your senses. In addition you would be asked how motivated you feel and some similar questions. It is expected that this will take no more than one hour to complete.
- Part 2: One week later you will be asked how many of these goals you achieved. There will also be some quick questions about how you went about each of these

goals. This can be done over the phone, face-to-face or by signing into an online survey. It is expected that this will take less than 15 minutes to complete.

Reimbursement for your time

Participants will receive a £5 voucher for taking part in this study

What are my rights?

Your participation is voluntary.

You may decide to stop being part of this research without explanation. If you decide that you do not wish the information you supplied to be included in the research then you can ask for it to be destroyed at any point. Your treatment will not be affected if you decide to withdraw from the study.

You do not have to respond to any questions which you do not wish to answer.

What are the risks and benefits of taking part?

In terms of potential benefits, you might find some of the techniques useful and continue to use them after the study. In terms of risks, there are no expected risks to taking part. You are welcome to have someone else with you if it would make it easier to take part in the study.

Is the study confidential?

Information collected will be confidential unless there are concerns about harm to yourself or someone else. If this occurs, we have a duty of care to inform the primary clinical service.

All information provided for data analysis and within any published work will be anonymised. Information will be stored securely.

What if there is a problem?

If you have any complaints about the study, then please contact the researcher Lisa Keane, Trainee Clinical Psychologist, or research supervisor, Dr James Gregory, in the first instance. If you would like to speak to someone not directly involved in the research, then please contact the patient advice and liaison service. Further information is available on the NHS choices website.

Every care will be taken to ensure your safety during the course of the study. University of Bath, the Research Governance Sponsor of the study has indemnity (insurance) arrangements in place for non-negligent harm, in the event that something does go wrong and you are harmed as a result of taking part in the research study. If you are harmed due to someone's negligence, then you may have grounds for legal action but you may have to pay for it.

What happens after the study finishes?

You will receive a debrief sheet at the end of the study, detailing the techniques used by all groups. You can also provide their email address/ postal address during the study, to indicate that they would like to receive the results of the study once the data has been analysed.

Findings from this research study will be submitted as part of the academic requirements for the Doctorate of Clinical Psychology at University of Bath. In order to share information more widely, this information will be written up as a journal article and will be submitted to an academic journal.

How do I contact the researcher?

Lisa Keane
Clinical Psychologist in Training
University of Bath
Lk372@bath.ac.uk
Contact number: XXXXXX

Dr James Gregory
Academic Supervisor
University of Bath
J.D.Gregory@bath.ac.uk

Appendix O3
Participant Information Sheet: Implementation Intentions condition

Information Sheet: Implementation Intentions
Can making concrete plans help us to achieve our goals?

Research Idea

Research suggests that those who devise concrete plans for when and where they plan to carry out their goals are more likely to achieve them. This is proposed to occur because making plans helps our brains to create cues which can prime or trigger us to get started. These are known as 'implementation intentions'.

My name is Lisa Keane, and I am a clinical psychologist in training at the University of Bath. Along with my supervisor, Dr James Gregory, and a number of colleagues working in psychology services in the South West, we are interested in investigating and comparing techniques which could potentially help people to carry out their goals. The research is sponsored by the University of Bath.

Invitation

We know that goal achievement can be particularly challenging if you experience low or depressed mood. Part of the intervention for low mood involves increasing activity levels (known as behavioural activation). We would like to investigate different techniques that might motivate and encourage people to carry out their chosen tasks. Your goals might relate to things that you used to do but don't do anymore. For example; doing the vacuum cleaning, or going out for a walk.

Eligibility

To be eligible for this study, the main difficulty for which you are seeking treatment should be depression/ low mood (this will also be assessed during the mental health screen), and you must score above a cut-off for at least mild depression on the Patient Health Questionnaire (PHQ-9). If you meet these criteria, then you will be able to progress to the next stage. Please note those who do not meet the above criteria in the screening process will not be able to take part in the research.

What would it involve?

- Part 1: After receiving an information pack in the post, you will be contacted by the researcher to discuss the research. If you agree that you would like to participate you will be asked to complete some questions about yourself and your mental health, and to provide answers to a few questionnaires. If you are found to be eligible for the study, the researcher will ask you to pick three goals that you would like to achieve over the upcoming week.
- The researcher will work with you to devise more concrete plans for when and where you plan to carry out these goals. These might be in the form of 'if..then' scenarios. In addition, you would be asked how motivated you feel and some similar questions. It is expected that this will take no more than 45minutes to complete.
- Part 2: One week later you will be asked how many of these goals you achieved. There will also be some quick questions about how you went about each of these

goals. This can be done over the phone, face-to-face or by signing into an online survey. It is expected that this will take less than 15 minutes to complete.

Reimbursement for your time

Participants will receive a £5 voucher for taking part in this study.

What are my rights?

Your participation in this study is voluntary.

You may decide to stop being part of this research without explanation. If you decide that you do not wish the information you supplied to be included in the research then you can ask for it to be destroyed at any point. Your treatment will not be affected if you decide to withdraw from the study.

You do not have to respond to any questions which you do not wish to answer.

What are the risks and benefits of taking part?

In terms of benefits, you might find some of the techniques useful and continue to use them after the study. In terms of risks, there are no expected risks to taking part. You are welcome to have someone else with you if it would make it easier to take part in the study.

Is the study confidential?

Information collected will be confidential unless there are concerns about harm to yourself or someone else. If this occurs, we have a duty of care to inform the primary clinical service.

All information provided for data analysis and within any published work will be anonymised. Information will be stored securely.

What if there is a problem?

If you have any complaints about the study, then please contact the researcher Lisa Keane, Clinical Psychologist in training, or the research supervisor, Dr James Gregory in the first instance. If you would like to speak to someone not directly involved in the research, then please contact the patient advice and liaison service. Further information is available on the NHS choices website.

Every care will be taken to ensure your safety during the course of the study. University of Bath, the Research Governance Sponsor of the study has indemnity (insurance) arrangements in place for non-negligent harm, in the event that something does go wrong and you are harmed as a result of taking part in the research study. If you are harmed due to someone's negligence, then you may have grounds for legal action but you may have to pay for it.

What happens after the study has ended?

You will receive a debrief sheet at the end of the study, detailing the techniques used by all groups. You can also provide their email address/ postal address during the study, to indicate that they would like to receive the results of the study once the data has been analysed.

Findings from this research study will be submitted as part of the academic requirements for the Doctorate of Clinical Psychology at University of Bath. In order to share information more widely, this information will be written up as a journal article and will be submitted to an academic journal.

How do I contact the researcher?

Lisa Keane
Clinical Psychologist in Training
University of Bath
Lk372@bath.ac.uk
Contact number: XXXXX

Dr James Gregory
Academic Supervisor
University of Bath
J.D.Gregory@bath.ac.uk

Appendix O4
Participant Information Sheet: Control Condition

Information Sheet: Goals Task
How can we make it more likely that we will achieve our goals?

Invitation

We know that goal achievement can be particularly challenging if you experience low or depressed mood. Part of the intervention for low mood involves increasing activity levels (known as behavioural activation). We would like to investigate different techniques that might motivate and encourage people to carry out their chosen tasks. Your goals might relate to things that you used to do but don't do anymore. For example; doing the vacuum cleaning, or going out for a walk.

My name is Lisa Keane, and I am a clinical psychologist in training at the University of Bath. Along with my supervisor, Dr James Gregory, and a number of colleagues working in psychology services in the South West, we are interested in investigating and comparing techniques which could potentially help people to carry out their goals. The research is sponsored by the University of Bath.

Eligibility

To be eligible for this study, the main difficulty for which you have sought treatment should be depression/ low mood (this will also be assessed during the mental health screen), and you must score above a cut-off for at least mild depression on the Patient Health Questionnaire (PHQ-9).

What would it involve?

- Part 1: After receiving this information pack, you will be contacted by the researcher to discuss the research. If you agree that you would like to participate you will be asked to complete some questions about yourself and your mental health, and to provide answers to a few questionnaires. The researcher will then ask you to pick three goals that you would like to achieve over the upcoming week. It is expected that this should take between 30-40 minutes to complete. Please note that this research can all be completed over the phone.
- Part 2: One week later you will be asked how many of these goals you achieved. There will also be some quick questions about how you went about each of these goals. It is expected that this will take less than 15 minutes to complete.

Reimbursement for your time

Participants will receive a £5 voucher for taking part in this study

What are my rights?

Your participation in this group is voluntary.
You may decide to stop being part of this research without explanation. If you decide that you do not wish the information you supplied to be included in the research then you can ask for it to be destroyed at any point. Your treatment will not be affected if you decide to withdraw from the study.

You do not have to respond to any questions which you do not wish to answer.

What are the risks and benefits?

In terms of benefits, you might find some of the techniques useful and continue to use them after the study. In terms of risks, there are no expected risks to taking part. You are welcome to have someone else with you if it would make it easier to take part in the study.

Is the study confidential?

Information collected will be confidential unless there are concerns about harm to yourself or someone else. If this occurs, we have a duty of care to inform the primary clinical service or your GP.

All information provided for data analysis and within any published work will be anonymised. Information will be stored securely.

What if something goes wrong?

If you have any complaints about the study, then please contact the researcher Lisa Keane, Trainee Clinical Psychologist, or research supervisor, Dr James Gregory, in the first instance. If you would like to speak to someone not directly involved in the research, then please contact the patient advice and liaison service. Further information is available on the NHS choices website.

Every care will be taken to ensure your safety during the course of the study. University of Bath, the Research Governance Sponsor of the study has indemnity (insurance) arrangements in place for non-negligent harm, in the event that something does go wrong and you are harmed as a result of taking part in the research study. If you are harmed due to someone's negligence, then you may have grounds for legal action but you may have to pay for it.

What happens after the study?

You will receive a debrief sheet at the end of the study, detailing the techniques used by all groups. You can also provide their email address/ postal address during the study, to indicate that they would like to receive the results of the study once the data has been analysed.

Findings from this research study will be submitted as part of the academic requirements for the Doctorate of Clinical Psychology at University of Bath. In order to share information more widely, this information will be written up as a journal article and will be submitted to an academic journal.

How do I contact the researcher?

Lisa Keane
Clinical Psychologist in Training
University of Bath
Lk372@bath.ac.uk
Contact number: XXXXX

Dr James Gregory
Academic Supervisor
University of Bath
J.D.Gregory@bath.ac.uk

Appendix P1

Patient Health Questionnaire (PHQ-9)

Questionnaire 1

Patient Health Questionnaire (PHQ-9) Depression
(Spitzer, Kroenke, Williams et al., 1999)

Over the last 2 weeks, how often have you been bothered by any of the following problems?	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

Appendix P2

Spontaneous Use of Imagery Questionnaire

Questionnaire 2
Spontaneous Use of Imagery Questionnaire
(Reisberg et al., 2003)

Please read each of the following descriptions and indicate the degree to which each is appropriate for you. Do not spend a lot of time thinking about each one, but respond based on your thoughts about how you do or do not perform each activity.

If a description is always completely appropriate then please write '5', if it is never appropriate write '1' and if it is appropriate about half the time write '3', and use the other numbers accordingly.

Score	Statement
	1. When going to a new place, I prefer directions that include detailed descriptions of landmarks (such as the size, shape and colour of a petrol station) in addition to their names
	2. If I catch a glance of a car that is partially hidden behind bushes, I automatically 'complete it', seeing the entire car in my mind's eye
	3. If I am looking for new furniture in a shop, I always visualize what the furniture would look like in particular places in my home
	4. I prefer to read novels that lead me easily to visualize where the characters are and what they are doing instead of novels that are difficult to visualize
	5. When I think about visiting a relative, I almost always have a clear mental picture of him or her
	6. When relatively easy technical material is described clearly in a text, I find illustrations distracting because they interfere with my ability to visualize the material
	7. If someone were to tell me two-digit numbers to add (e.g. 24 and 31), I would visualize them in order to add them
	8. Before I get dressed to go out, I first visualize what I will look like if I wear different combinations of clothes
	9.When I think about a series of errands I must do, I visualize the stores I will visit
	10.When I first hear a friends voice, a visual image of him or her always springs to mind
	11.When I hear a radio announcer or DJ I've never actually seen, I usually find myself picturing what they might look like
	12. If I saw a car accident, I would visualize what happened when later trying to recall the details

Appendix P3

Intrusive Verbal Thoughts Questionnaire

Questionnaire 3
Intrusive Verbal Thoughts Questionnaire

(as used in McCarthy-Jones, Knowles & Rowse, 2012)

		Strongly Disagree	Disagree	Unsure	Agree	Strongly agree
	Question	**1**	**2**	**3**	**4**	**5**
1	There are verbal thoughts that come to mind that I cannot erase.					
2	My thoughts frequently return to one word or phrase.					
3	I have verbal thoughts in my mind that I cannot stop					
4	There are verbal thoughts that keep jumping into my head.					
5	I find it hard to sleep as verbal thoughts keep coming into my head.					
6	There are negative verbal thoughts about my past that keep coming to mind.					
7	When I have had an argument with someone, I will keep having verbal thoughts about it for the next few days, even though I do not want to.					
8	I often have verbal thoughts about things that will happen in the future, without meaning to.					
9	There are some words or phrases that enter my head without me being able to avoid it.					
10	I keep hearing word or phrases from my past in my head, against my will.					

Appendix Q

Participant Consent Form

Consent Form

Department of Psychology | UNIVERSITY OF BATH

What methods can best help us to achieve our goals?

Name of Researcher:
Lisa Keane
Trainee Clinical Psychologist

Research Supervisors:
Dr James Gregory
Bath University

I confirm that I have read and understood the information sheet for the above study. ☐

I understand that my participation is voluntary and that I am free to withdraw at any time. I understand that I do not have to give a reason for withdrawing from the study. ☐

I agree for the information I supply to be used in the above study. ☐

I consent for the telephone conversation to be recorded ☐

_____ _____
Name of Participant Date

_____ _____

Appendix R1

Mental Imagery condition Protocol

Participant PIN_____ Duration of intervention_____

Script:
'Thank you for your interest in the research. As discussed, the aim of this project is to investigate and compare techniques which have shown promise in helping people to achieve their goals'.

- Check that participant has received the information pack in the post. If they have received the information pack, check whether they have had time to read the information sheet. If not, go through information sheet with participant.

- Provide opportunity for participant to ask questions.

- Ask whether they are interested in taking part after reading the information sheet and having the opportunity to ask questions.

- Ask whether they are happy for conversation to be audio-recorded. If they agree, ask participant to confirm on the recording that they are happy to participate. If participant does not wish for conversation to be audio-recorded, ask participant to return consent form prior to data being collected.

- Ask participant if they have had a chance to complete the enclosed measures. If so, record scores (PHQ-9, SUIS, Verbal intrusive thoughts questionnaire). If not, complete measures with the participant.

- Complete demographic information sheet (see uploaded document) and mini international neuropsychiatric interview (see uploaded document).

'Research has shown that you are more likely to carry out goals if you 'mentally imagine' performing this intention in a very vivid manner! This is proposed to occur because mental practice and actual performance activate similar networks in the brain. We would like you to take part in a mental imagery exercise in order to improve your chances of achieving your goals'.

'First, I would like you to think about some of your personal goals. It is best if these are things which you used to do, but are not currently doing. Goals are described as future experiences that you would like to achieve (e.g. '*I would like to exercise*

more') or avoid (e.g., *'Not let little things upset me'*). These could include household chores like doing the vacuum cleaning, or fixing something, or more pleasurable activities like going for a walk, or going shopping. It is important to try and pick realistic goals for the week'.

Goals Task (Dickson & McLeod, 2004)

Prompts for eliciting goals (Set timer for 90 seconds for each section, allow additional time if needed)

'Please could you come up with some goals that you would like to complete over the upcoming week in response to the following statements…'

'In the next week it will be important for me try and… (Record Approach Goals here)

In the next week it will be important for me to try and avoid… (Record avoidance goals here)

Are there any other things that you would have liked to have done in the last week but didn't? (Record any additional goals here)

'Which three goals would you like to complete over the upcoming week? It is important that these goals are realistic and measureable so that we will know next week whether they have been achieved or not'. (Record goals below)

1

2

3

Goal Ratings
(Dickson, Moberley & Kinderman, 2011)

Likelihood rating
How likely is it that you will complete Goal X?

1 7
Not at all likely to happen Extremely likely to happen

Perceived control rating
How much control do you have over achieving this task?

1 7
No control Complete Control

Importance rating
How important is achieving this goal to you?

1 7
Not very important Extremely important

Overall, how motivated do you feel to complete Goal X?

1 7
Not at all motivated Extremely motivated

Instructions (adapted from Knauper et al., 2011)

I will now ask you to complete a mental imagery task, using your first goal to practice this technique. Please mentally imagine yourself completing _____ (insert goal 1). Make sure to use all of your senses in your mental imagery of this goal: try and notice what you see, feel, taste and smell. Please think about all the steps involved in as much detail as possible, including the completion of this goal (combined imagery).

Please close your eyes and really try and imagine this intention, making it as vivid as possible.

Mental Imagery Script (adapted from Wild, Hackmann, & Clark, 2009, to suit particular task)

Have you got it now?

What can you see? Can you describe the image to me?

Do you see yourself in the image?

Can you see other people in the image? What are they doing?

Can you hear anything?

And in the image, what sensations do you have in your body?

Other potential prompts…
(What is the first thing that you must do? Imagine yourself making a start.. what do you see? What does this feel like? Can you hear or smell anything? How is your body positioned? What movements are you making?
What's the next step? What does that feel like? What do you notice around you?)

When task completed, ask participant:

How vivid was your image (Based on Hertel et al., 2003)?

1	7
Not at all vivid	Extremely vivid

How much were you imagining the image through your own eyes (from Wild et al., 2009)?

1	9
Not at all	Extremely/ All the time

In relation to Goal 1, please could you answer the following questions again please:

Goal Ratings
(Dickson, Moberley & Kinderman, 2011)

Likelihood rating
How likely is it that you will complete Goal X?

1	7
Not at all likely to happen	Extremely likely to happen

Perceived control rating
How much control do you have over achieving this task?

1	7
No control	Complete Control

Importance rating
How important is achieving this goal to you?

1	7
Not very important	Extremely important

Overall, how motivated do you feel to complete Goal X?

1	7
Not at all motivated	Extremely motivated

'I'd like to encourage you to use this method when you think about the other goals you would like to achieve over the week. I'd also like to follow up with you next week to think about how many of these goals you have completed. If you have not carried out the goals then this is really useful information to have, to help us compare different techniques.

Make appointment for follow up. Add to diary and spreadsheet.

Appendix R2

Protocol: Implementation Intentions condition

Participant PIN_____ Duration of intervention_____

Script:
'Thank you for your interest in the research. As discussed, the aim of this project is to investigate and compare techniques which have shown promise in helping people to achieve their goals'.

- Check that participant has received the information pack in the post. If they have received the information pack, check whether they have had time to read the information sheet. If not, go through information sheet with participant.

- Provide opportunity for participant to ask questions.

- Ask whether they are interested in taking part after reading the information sheet and having the opportunity to ask questions.

- Ask whether they are happy for conversation to be audio-recorded. If they agree, ask participant to confirm on the recording that they are happy to participate. If participant does not wish for conversation to be audio-recorded, ask participant to return consent form prior to data being collected.

- Ask participant if they have had a chance to complete the enclosed measures. If so, record scores. If not, complete measures with the participant.

- Complete demographic information sheet (see uploaded document) and mini international neuropsychiatric interview (see uploaded document).

'Research has shown that planning is more effective if you first identify a situation, and then decide what you will do in that situation. This is proposed to occur because making plans creates cues which can prime or trigger us to get started. These are known as 'implementation intentions'.'

'First, I would like you to think about some of your personal goals. It is best if these are things which you used to do, but are not currently doing. Goals are described as future experiences that you would like to achieve (e.g. '*I would like to exercise more*') or avoid (e.g., *'Not let little things upset me'*). These could include household chores like doing the vacuum cleaning, or fixing something, or more

pleasurable activities like going for a walk, or going shopping. It is important to try and pick realistic goals for the week'.

Goals Task (Dickson & McLeod, 2004)

Prompts for eliciting goals (Set timer for 90 seconds for each section, allow additional time if needed)

'Please could you come up with some goals that you would like to complete over the upcoming week in response to the following statements…'

'In the next week it will be important for me try and… (Record Approach Goals here)

In the next week it will be important for me to try and avoid… (Record avoidance goals here)

Are there any other things that you would have liked to have done in the last week but didn't? (Record any additional goals here)

'Which three goals would you like to complete over the upcoming week? It is important that these goals are realistic and measureable so that we will know next week whether they have been achieved or not.' (Record goals below)

1 _____

2 _____

3 _____

Goal Ratings
(Dickson, Moberley & Kinderman, 2011)

Likelihood rating
How likely is it that you will complete Goal X?

1	7
Not at all likely to happen	Extremely likely to happen

Perceived control rating
How much control do you have over achieving this task?

1	7
No control	Complete Control

Importance rating
How important is achieving this goal to you?

1	7
Not very important	Extremely important

Overall, how motivated do you feel to complete Goal X?

1	7
Not at all motivated	Extremely motivated

'I will now ask you to come up with a very specific plan for when and where you will carry out GOAL 1 in the next week. For example, you might find it useful to state: IF its two o' clock on a Thursday, THEN I will put on my trainers and go for a walk. Please try and think a very specific plan for when and where you will carry out GOAL 1 in the next week'. (Instructions adapted fro Knauper et al., 2011)

Write down implementation intention for GOAL 1:

_____
_____
_____
_____

'In relation to your first goal, please could you answer the following questions again please.'

Goal Ratings
(Dickson, Moberley & Kinderman, 2011)

Likelihood rating
How likely is it that you will complete Goal X?

1	7
Not at all likely to happen	Extremely likely to happen

Perceived control rating
How much control do you have over achieving this task?

1	7
No control	Complete Control

Importance rating
How important is achieving this goal to you?

1	7
Not very important	Extremely important

Overall, how motivated do you feel to complete Goal X?

1	7
Not at all motivated	Extremely motivated

'I'd like to encourage you to use this method when you think about the other goals you would like to achieve over the week. I'd like to follow up with you next week to think about how many of these goals you have completed. If you have not carried out the goals then this is really useful information to have too, to help us compare different techniques. Make appt for follow up. Add to diary and spreadsheet.
If participant wishes to complete follow-up by link, ask whether they give permission to be contacted as a reminder if it is not completed by a certain date (e.g. one week and a day following the mental imagery task).

Appendix R3

Protocol: Control Condition

Participant PIN_____

Duration of intervention_____

Script:
'Thank you for your interest in the research. As discussed, the aim of this project is to investigate and compare techniques which have shown promise in helping people to achieve their goals'.

- Check that participant has received the information pack in the post. If they have received the information pack, check whether they have had time to read the information sheet. If not, go through information sheet with participant.

- Provide opportunity for participant to ask questions.

- Ask whether they are interested in taking part after reading the information sheet and having the opportunity to ask questions.

- Ask whether they are happy for conversation to be audio-recorded. If they agree, ask participant to confirm on the recording that they are happy to participate. If participant does not wish for conversation to be audio-recorded, ask participant to return consent form prior to data being collected.

- Ask participant if they have had a chance to complete the enclosed measures. If so, record scores. If not, complete measures with the participant.

- Complete demographic information sheet (see uploaded document) and mini international neuropsychiatric interview (see uploaded document).

'First, I would like you to think about some of your personal goals. It is best if these are things which you used to do, but are not currently doing. Goals are described as future experiences that you would like to achieve (e.g. '*I would like to exercise more*') or avoid (e.g., *'Not let little things upset me'*). These could include household chores like doing the vacuum cleaning, or fixing something, or more pleasurable activities like going for a walk, or going shopping. It is important to try and pick realistic goals for the week'.

Goals Task (Dickson & McLeod, 2004)

Prompts for eliciting goals (Set timer for 90 seconds for each section, allow additional time if needed)

'Please could you come up with some goals that you would like to complete over the upcoming week in response to the following statements…'

'In the next week it will be important for me try and… (Record Approach Goals here)

In the next week it will be important for me to try and avoid… (Record avoidance goals here)

Are there any other things that you would have liked to have done in the last week but didn't? (Record any additional goals here)

'Which three goals would you like to complete over the upcoming week? It is important that these goals are realistic and measureable so that we will know next week whether they have been achieved or not.' (Record goals below)

1 _____

2 _____

3 _____

Goal Ratings
(Dickson, Moberley & Kinderman, 2011)

Likelihood rating
How likely is it that you will complete Goal X?

1	7
Not at all likely to happen	Extremely likely to happen

Perceived control rating
How much control do you have over achieving this task?

1	7
No control	Complete Control

Importance rating
How important is achieving this goal to you?

1	7
Not very important	Extremely important

Overall, how motivated do you feel to complete Goal X?

1	7
Not at all motivated	Extremely motivated

'I'd like to follow up with you next week to think about how many of these goals you have completed. If you have not carried out the goals then this is really useful information to have too, to help us compare different techniques.
Make appt for follow up. Add to diary and spreadsheet.

Appendix R4:

Protocol for follow-up

Participant PIN_____

Please could you tell me the three goals that you wanted to complete when we last spoke. If participant doesn't remember, remind participant.

1	Remembered by participant Y/N
2	Remembered by participant Y/N
3	Remembered by participant Y/N

Please could you pick an answer in relation to the following statements.

I completed my first goal which was to _____

Strongly Agree, Agree, Disagree, Strongly disagree

I completed my second goal which was to_____

Strongly Agree, Agree, Disagree, Strongly disagree

I completed my third goal which was to _____

Strongly Agree, Agree, Disagree, Strongly disagree

In terms of how you achieved each of these goals, could you please indicate whether you used any of the following techniques:
Goal 1:

1. I imagined/ visualised myself completing the task
2. I created 'if…then' scenarios describing when and where I planned to carry out the task (e.g. if its 4 o'clock on a Wednesday then I will put on my trainers and go for a walk)
3. I used another strategy. Please describe
   _____
4. I did not use any strategies

Goal 2:

1. I imagined/ visualised myself completing the task

2. I created ‘if…then’ scenarios describing when and where I planned to carry out the task (e.g. if its 4 o’clock on a Wednesday then I will put on my trainers and go for a walk)

3. I used another strategy. Please describe

   _____

4. I did not use any strategies

Goal 3:

1. I imagined/ visualised myself completing the task

2. I created ‘if…then’ scenarios describing when and where I planned to carry out the task (e.g. if its 4 o’clock on a Wednesday then I will put on my trainers and go for a walk)

3. I used another strategy. Please describe

   _____

4. I did not use any strategies

‘For those in the MI/ II group, did you use the technique we discussed to try and achieve any other goals during the week?’

‘Thank you for taking part. You will receive a debrief information sheet which provides details on the other tasks, £5 voucher and if interested we will send you the results when they are available’. (If interested, add email address/postal address to spreadsheet).

Appendix S

Debrief Information Sheet

Department of Psychology | UNIVERSITY OF BATH

Information Debrief Sheet

Dear (participant)

Thank you for taking part in this research. It is hoped that the results of this research will provide some interesting new ideas and techniques for goal achievement for people with low mood and depression. This will potentially have implications for mental health services, and therapy delivery in general. We know that those people who complete homework, amongst other important factors, tend to do better in therapy. Therefore, if we can establish and refine techniques that best enable people to complete homework then this will hopefully enable more people to benefit from therapy.

Summary of Research
During this research, participants were randomly assigned to three groups.
Your group condition was _____
In all groups, participants were asked to come up with three goals that they would like to complete over the upcoming week.

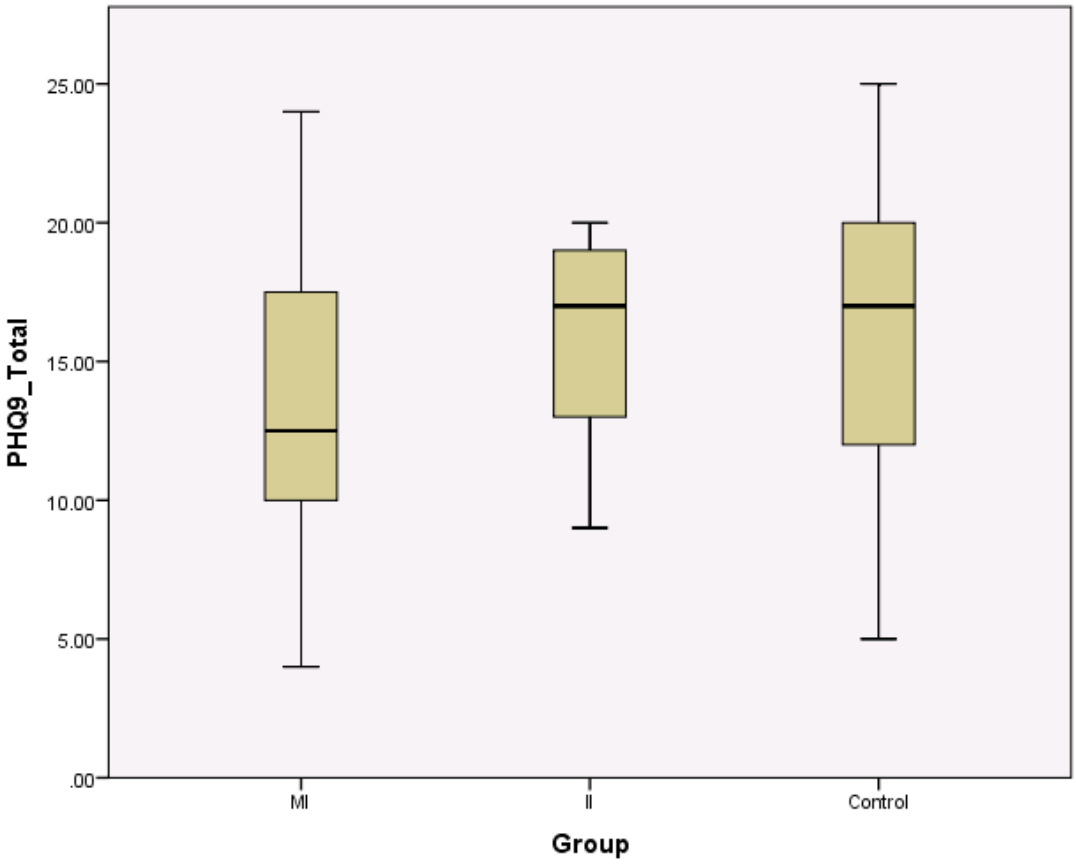
Control Group
Participants in the control group were not provided with any guidelines on how they should approach their goals.
Mental Imagery Group

Participants in the mental imagery condition were asked to vividly imagine themselves completing their goal. They were asked to use as many of their senses as possible when doing so. Research, particularly in the area of sports psychology, suggests that those who vividly imagine themselves carrying out a particular goal are more likely to achieve it and demonstrate better performance. This is proposed to occur because mental practice and actual performance activate similar networks in the brain.

Implementation Intentions
Participants in the implementation intentions were asked to come up with more specific and concrete plans about when and where they planned to carry out their task. It is usually better if these are phrased in an 'if.. then' way. For example, 'If it's 4pm on a Friday, then I will put on my trainers and go for a walk'. Research suggests that those who devise concrete plans for 'when' and 'where' they plan to carry out their goals are more likely to achieve them. This is proposed to occur because making plans helps our brains to create cues which can prime or trigger us to get started.
Thank you so much for taking part- if you have any questions then please feel free to send me an email on lk372@bath.ac.uk

Appendix T

Boxplots: Depression Scores



Appendix U1

Confirmation of IRAS ethical approval

Part of the research infrastructure for Wales funded by the National Institute for Social Care and Health Research, Welsh Government.
Yn rhan o seilwaith ymchwil Cymru a ariannir gan y Sefydliad Cenedlaethol ar gyfer Ymchwil Gofal Cymdeithasol ac Iechyd, Llywodraeth Cymru

NISCHR RES
Gwasanaeth Moeseg Ymchwil | Research Ethics Service

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PO Box 108
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Jobswell Road
St David's Park
Carmarthen SA31 3WY
(for sat nav/courier purposes SA31 3HB)

Telephone : 01267 225045
E-mail : sue.byng@wales.nhs.uk
Website : www.hra.nhs.uk

Miss Lisa Keane
Clinical Psychologist In Training
Taunton and Somerset
University of Bath, Department of Clinical Psychology, 6 West,
Claverton Down, Bath,
North East Somerset
BA2 7AY

27 April 2015

Dear Miss Keane

Study title:	**Using mental imagery to enhance goal achievement in participants with low mood and depression: A three-group comparison**
REC reference:	**15/WA/0109**
Protocol number:	**N/A**
IRAS project ID:	**162183**

Thank you for your email of 27 April 2015, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should you wish to provide a substitute contact point, wish to make a request to defer, or require further information, please contact the REC Manager, Ms Sue Byng. . Under very limited circumstances (e.g. for student research which has received an unfavourable opinion), it may be possible to grant an exemption to the publication of the study.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Appendix U2

Ethical approval: 2gether Trust

Gloucestershire Hospitals NHS
NHS Foundation Trust
% Gloucestershire Research Support Service
Leadon House
Gloucestershire Royal Hospital
Great Western Road
Gloucester
GL1 3NN
Telephone: 0300 4225463
Facsimile: 0300 4225469
Email: mark.walker@glos.nhs.uk

Our R&D ref: 15/006/2gt

Wednesday, 20 May 2015

Miss Lisa Keane
Clinical Psychologist in Training
University of Bath
Department of Clinical Psychology
6 West,
Claverton Down,
Bath BA2 7AY

Dear Lisa

Study title: **Using mental imagery to enhance goal achievement in participants with low mood: A three- group comparison**

REC reference **15/WA/0109**
IRAS Ref: **162183**

Thank you for forwarding information on the above study. I can confirm the approval of 2gether NHS Foundation Trust for the above study to proceed.

Where an NHS Organisation's role in the study involves the recruitment of participants to Clinical Research it is the responsibility of the Sponsor to ensure before the start of the study that site initiation is provided. Potential Research Participants should not be approached until site initiation has been provided and the 'green light' has been given by the Sponsor.

Your project will now be added to the Gloucestershire Health Community Research Register which will identify the following:

- Study Title: **As above**
- Chief Investigator: **As above**
- Sponsoring Organisation: **University of Bath**
- Host Organisation: **2gether NHS Foundation Trust**
- Type of Study: **Student Project**

Appendix U3

Ethical Approval: University of Bath

Ailsa Russell <A.J.Russell@bath.ac.uk>

Wed 27/05/2015 15:10

Inbox

Mark as unread

To: Lisa Keane;

Cc: Corinna Box;

MessageHeaderAnalyzer + Get more apps

Dear Lisa Keane

Reference number 15-127: Using mental Imagery to enhance goal achievement in participants with low mood: A three group comparison.

The ethics committee have considered your ethics proposal for the study above and have given it full ethical approval.

Best wishes with your research.

Dr Ailsa Russell

Member Psychology Research Ethics Committee

On behalf of Dr Michael Proulx, Chair.